



Ever since the founding of the Atlantic it has been customary for the Editor to visit England, there to encourage Atlantic contributors, to scout for new material, and to enlarge his understanding of English policy, domestic and international. EDWARD WEEKS, who held a scholarship at Trinity College, Cambridge, after his graduation from Harvard, has made repeated trips to Britain during his twenty-five years on the Atlantic staff. In this article he notes the changes which have taken place since 1948, and gives his impressions of British reaction to the Government, austerity, Russia, and the H-bomb.

WHAT ABOUT THE BRITISH?

by EDWARD WEEKS

I AM not the first American to regard the *Times* of London as an accurate barometer of how the British are thinking and feeling. The layout of its pages is sedate and unchanging; and as I sat reading it the morning after I arrived, I skimmed the fine print on the first page with those modest subtitles: "Births," "Marriages," "Deaths," "In Memoriam," "Personal," "Public Appointments," "Club Announcements," "Stamp Collecting," "Kennel Farm and Aviary." No other ranking paper in the world has such a personal, unexciting first page. The sports come on page 2, and the lead stories in their modest quarter-inch headlines will be found on page 6, facing the editorials. This make-up seems to me indicative of the English love of quiet.

The *Times*, the *Daily Mail*, the *Evening Standard*, and the *Daily Telegraph* were the four papers which I followed constantly; and in them all, I found a more relaxed attitude toward the news than I had known in America. The headlines about the cold war seemed more tempered. The speaking in Parliament is reported generously and with that flavor of banter and those traditional stage directions — (Cheers), (Groans from the Opposition), (Cries of "Hear! Hear!") — which the British expect as they read their news. The editorials speak with force, and it seemed to me that they have the authority which in our papers has been shifting from the

editorial writers to the columnists. The obituaries — I have reached the age at which I salute an increasing number of my acquaintances in this department — are essays in miniature.

But if you are willing to hunt through it, that Personal Column on the first page of the *Times* is one of the surest revelations of what is taking place in Britain. Here, in insertions of from three to five lines and at the cost of ten shillings a line, is a series of announcements which tell the changing times. My eye was first caught by the proclamation in capital letters that Universal Aunts, Ltd., would do "practically anything" for you in London that you wanted done. The Aunts, I found on inquiry, were a bureau who would do your errands, provide baby sitters and dog walkers, or order anything you needed in London. They were followed by such individual items as these: —

EX-PARACHUTIST, 29, P.o.W. escapee, second class Hons. French and German, widely read, wants unusual, dangerous, legitimate WORK till September. — Write Box Z.457, The Times, E.C.4.

DOES the Authentic History of Pleating, dating from 2850 B.C. throughout the ages, interest anyone? — Write Box E.408, The Times, E.C.4.

ADVERTISER wishes to PURCHASE 3 SILVER CHALLENGE CUPS (second hand); no dealers. — Write Box Z.501, The Times, E.C.4.

Copyright 1950, by The Atlantic Monthly Company, Boston 16, Mass. All rights reserved.

BLITZ YOUR BOOKSHELVES. — Books of all kinds welcomed by the Royal Alexandra and Albert School, who can turn them into money to help feed and clothe their 40 parentless children. — Parcels to 34, Ludgate Hill, E.C.4.

WANTED to hear of a really **WARM HOTEL**, sunny, and heated throughout. — Write Box P.279, The Times, E.C.4.

The little hotel I stopped at, just off Green Park, couldn't have been warmer or more comfortable, and the food was infinitely better than that of 1948. It's long been the fashion to disparage English cooking; but for my money they cook turbot, trout, and plaice better than the French. During the war years when they had no lard they grilled less and boiled more; and now since their cooking fats have come back, their good dishes have a holiday taste.

The English extend their week-ends. Easter week-end begins on Maundy Thursday, and after the traditional service in Westminster Abbey we went down to Dorsetshire, the Hardy country, with its narrow chalk streams — the water clear as gin — and its pre-Roman remains to be seen on the rolling downs — I mean the earthworks and the barrows on the hilltops, and that outsize and most masculine figure, the Giant Helith, 150 feet high and complete in all his parts, which was carved deep into the underlying chalk at Cerne Abbas long before the Romans came.

These downs make for good grazing and firm riding. The fields and hedges sloping gently down to the inevitable little stream in the valley floor form a natural course for a Point-To-Point, which to my way of thinking is the most exciting, spontaneous kind of horse racing. The Point-To-Point I saw was a colorful cross section of England which might have been written by Masfield.

We ate our basket lunch in the parking lot, and the atmosphere was that of a football crowd getting ready for a game in the Yale Bowl. I noticed in what pleasant ways with food and drink the English prepare themselves for an occasion like this. Then, joining the crowds that were pouring in by bus and by bicycle, we entered the sloping field which looked down on the Steeplechase. Here, from the high points, the entire course could be followed — the hedges, the water jump, the long home stretch up to the finish.

It seemed as if the whole country had turned out — the farmers, the tradesmen from the villages, the gentry, the racing touts, and the bookies. The horses for the first race were already in the paddock, and there was just time to make my bet. As I followed the card under the coaching of my host, it was easy to see that the farmers were playing a predominant part in this meet. Many of them were riding their own horses, and some of them had the best mounts in the field. The boots and saddles were burnished, the horses well kept, the racing silks

bright, but I was told that this was no longer the work of grooms. Each rider simply did for himself, and I liked the idea.

Outsider that I was, I found myself losing steadily to 'Andsome 'Arry, the bookie from Liverpool who seemed to be giving the biggest odds. Perhaps, I thought, I can make it all up on the Ladies' Race. As I stood on the edge of the paddock listening to the country comments on the ladies who were then mounting, I decided to bet my all on the prettiest. Trouble was there were two of them, both blondes, the younger in her twenties, the other slightly older but, as the countryman next to me said, with "as fine a set of bolsters as ever I've set eyes on." At this indecisive moment, my host pointed out a horse-faced woman who was being eased aboard a black nag. "That's Marriat," he said. "When he runs, there's nothing that can stop him. We'll get big odds on him and he might do." I took one last lingering look at the young blonde and then obeyed Satan. Marriat was in last place going over the third jump; and coming up to the fifth jump, swerved right off the course. Meantime my blonde was making a race of it and on the second time round, two jumps from the finish, she came into the clear and held her lead all the way home. So I scored a moral victory even though I lost my shirt.

2

THE British are so careful not to show emotion that an American rarely encounters in print or in table talk the deep-down angers and anxieties which beset them today. Only rarely, and then with close friends, did I touch off a blast of indignation against the Israeli from one who thought that the Arabs had been brutally treated; or realize the dismay of those who know South Africa and who feel that only calamity can come from the disintegration of the Smuts Party if it be followed by the ruthless racial intolerance of the Afrikaner; or uncover the widespread political hostility which, like the fires eating away under a peat bog, occasionally breaks to the surface in the Conservative hatred of Socialism, or vice versa. This heat which can be as bitter as anything engendered against F.D.R. is not confined to one party.

What changes have occurred during the twenty months of Labor rule since I was last there? Superficially, both town and country seem more prosperous. There are many more new cars in evidence — and incidentally, what a pleasure it is to drive, or be driven, in a country where the rules of the road are observed and the road hog does not exist. The traffic in London at noon and from four to five was as slow as the worst in Boston, but it was accepted with patience. This will get worse, for there is still a long waiting list for cars — it takes anywhere from six months to two years to get your new model.

A Bentley — which today is near the top of the market — with taxes included, costs in the neighborhood of five thousand pounds. And when you remember that there are in the United Kingdom fewer than two hundred persons whose income after taxes is in excess of five thousand pounds a year, you will understand that the purchase of Bentleys, like the purchase of so much else in England, is coming straight out of capital. In 1938 there were eleven thousand whose annual income after taxes was over five thousand pounds.

As the capital runs out, it is progressively harder for a man in middle life to earn, borrow, or inherit enough money with which to buy himself a partnership in one of the old firms. So you have the spectacle of men in their upper seventies, past the age of retirement, still actively directing their offices because there is no young man with the means to take over.

Self-help is the rule in the country, and the country houses might have gone to the dogs except for the British adaptability. What has happened is this: The biggest showpieces have been deeded to the National Trust and are preserved as museums. Others are being lived in (in one wing) by the owners, but they too are open to the public on stated days — and the question the Colonels were arguing about in Letters to the *Times* was how much of an admission fee it was right for them to charge. Still others have been subdivided and are now being occupied by two or three households. How the British maintain their sense of privacy when separated by no more than a partition is something an American will never quite understand.

The English are doing without savings and they are learning to do without servants. This is as the Labor Party would have it. But the Conservatives, the capitalists, have not ceased to think about the needs of a rainy day. There is a strong tendency to put such money as you have into the soil — to invest in a farming combine, a dairy herd, a chicken farm — or into a painting or hallmark silver or jewels or old furniture whose value at Christie's may rise.

3

LONDON is beginning to take pride in itself again. The turf in the parks is well kept and the bomb shelters have been smoothed out of sight; the flower beds were gay with spring flowers when I was there. The clothes have smartened, and you will see many a Londoner in that typical costume — dark coat, striped pants, tightly furled umbrella, and bowler. The shops have been painted; Regent Street with its flags and flower boxes looks ready for a parade; new buildings are beginning to fill some of the worst of the Blitz cavities, and one hears that British industry has installed more new machinery, more new processes, in the past twenty

months than in any comparable period since the Industrial Revolution.

So much is on the surface, and what the friendly American wants to know is what goes on underneath. The new Budget was passed while I was there, and that gave me some indication. Two measures recommended by that exacting, Cromwellian figure, Sir Stafford Cripps, brought instant resentment: the increased tax on gasoline and a retroactive tax which had been deliberately aimed to penalize two motor magnates. These gentlemen the year previous had each been voted a bonus of a hundred thousand pounds in tax-exempt securities for the promise that they would devote their entire careers to the companies employing them. Now the Chancellor of the Exchequer decreed, months after the event, that these bonuses should not be tax-exempt; and since the gentlemen were each in the highest possible tax bracket, they were expected to pay back to the government nineteen shillings and sixpence on each pound they had received. With his ironlike candor, Sir Stafford remarked that this retroactive measure was "perfectly legal but indefensible," and so the City thought it.

The tax on gasoline cut at every owner of a car or the poor man's car, the motor bike, and particularly at those salesmen who have to pay their traveling expenses out of what they earn. The British railroads have been losing money steadily under nationalization, and John Bull interpreted this new tax on gasoline as a deliberate effort to force the people to give up motoring and use the railroads more.

I asked about the social services. "Are people expected to help pay the expense? And what about this talk of a shilling a prescription, to be collected by the druggist?" "It would require too much bookkeeping," came the rejoinder, "and there would be nothing left when you got through your red tape." "Well," I asked, "what happens to Aunt Minnie when she breaks the first pair of spectacles you have given her? Can she get another set free?" "Personally, I think she ought to pay for that second set," said a Labor friend of mine, but I am not sure he speaks for the party.

It is perfectly natural for the average Englishman to want to have more money to spend as he pleases. Who doesn't? I thought I detected a growing exasperation against controls, and it seemed to me strange that the Conservatives had not made a more determined effort to meet this in the last election.

"I wonder what would have happened," a Londoner said to me, "if the Tories, instead of playing safe with 'me-tooism,' had campaigned for a reasonable reduction of social service but stressed the intention of giving every English household five shillings more a week to spend as it pleased. They didn't have the courage to try it, but I think it would have won them votes."

There may be a ground swell here which will be felt in the next election. Herbert Morrison, one of the most acute minds in the Labor Party, who came out of the elections with increased prestige — he gained where Aneurin Bevan lost — is said to believe that Labor must anticipate this resurgence of independence. I heard talk that Labor might issue a national dividend each year with increased pay for certain ranks and certain industries, but of course that could never be done as long as Marshall Aid was on the books; and if it were done, it would mean the virtual suppression of collective bargaining. You could not have collective bargaining fought out against private enterprise, and a national dividend issued by a Socialist government. It is a case where Socialist theory and Labor practice collide.

The nationalization of steel, I was told repeatedly, would mark time until after the next General Election. Labor would come up with a blueprint of how steel was to be operated after nationalization, and this blueprint presumably would be ready next October. But it would then be up to the country to determine at the election whether or not these steps were actually to be taken. "If the Conservatives are returned," I asked, "won't the election be followed by a sporadic outbreak of strikes?" "Yes," my friend said, "I think strikes would come. But most of them would be short-lived. The thing this country wants above anything else is full employment. If management actually closed the plants, a compromise would be found and the men would go back."

4

I LIVED for a year in England in 1922 — four years after the end of the First World War; and now on this trip five years after the Second World War, I could not help comparing the enormous change in the Briton's attitude toward the United States. In 1922, we and the other Colonials were regarded with condescension if not arrogance. That spring I remember being bellowed at by a ruddy retired Colonel with whom I was sharing a railroad carriage on the trip from Cambridge to London. After an hour of silence, he suddenly snapped down the copy of the *Times* behind which he had taken shelter. "Mark you," he said, "we'll get it back. We'll get it back!" It was the first word he had addressed to me, and I hadn't the least idea of what he was thinking. "Get what back, sir?" I asked. "Our shipping — the shipping we've lost to your people during the war!"

For obvious reasons, nothing like that could happen now. The problems of adjustment which remain to be settled in Britain today, and they are huge, call for the best brains they have and the best we can loan them in men like Lewis Douglas, W. John Kenney, Thomas K. Finletter, and Clar-

ence Randall. I had the feeling that something like an industrial renaissance has been taking place in Britain since the war. It needs to go on. The Chancellor of the Exchequer must continue to close that gap between British spending and British income. To do this, as I see it, he needs help in two ways from us: if we are serious in our desire to help revive British enterprise in our tariff adjustment, then we must be honest enough to give them the opportunity to sell us their goods on a competitive basis. Otherwise we commit them to our dole. Secondly, if we are serious in the cold war, then we must assist the British in maintaining peace.

British apprehension may not show itself in the daily headlines, but it is there just the same. On one of my last days in London, I lunched with the editor of a liberal weekly, and present were two members of Parliament — the one Conservative, the other Labor — each of whom has given me good counsel in times past. The question of Leadership came up, and it pleased me to hear that Churchill was reported in fine fettle.

"Did that statement of his that he would be willing to reopen the discussion of atomic control with Stalin win him votes?" I asked.

"Yes," said the Conservative, "it caught Labor out and it wasn't just a political gesture either. The Old Man was confident that he was going to win the election, and he wanted the Russians to have notice in advance that he would be willing to come to grips on this most crucial subject."

"How do you people feel in America?" the English editor asked me. "Do you feel that the Russians have made any real concessions? Are you prepared to go beyond the Baruch proposals?"

I said I thought that our negotiators felt that they had been beating their heads against a stone wall but that our people at large were still hopeful that an approach could be found to an understanding.

"Suppose we British came up with a plan," the English editor continued, "a plan which your State Department was not willing to endorse. Would we be free to offer it on our own?"

"No," the Conservative said, speaking for me, "I think the two of us act together in this."

"Then," said the editor, "what you are really saying is this: that in the event that all arbitration fails, the British Isles, which are today a great anchored carrier with no escape from an H-bomb, may have either to run the risk of the H-bomb or accept Russian occupation."

"Yes, that's exactly it," said the Conservative, "and I say we'll fight."

Either you have an ally whom you can talk to, depend on, and with whom the word reciprocity takes on a larger meaning, or you don't. If there is a stauncher ally for us than Britain and the Commonwealth, I don't know where to find him.



We have all heard of the extraordinary daring of the American submarine commanders in their raids against Japanese shipping. But the actual box score was not disclosed, and not until recently has the public begun to realize that the performance of American torpedoes in the Pacific must stand as one of the great all-time failures of American ordnance. Why this was so and how it was remedied is now recounted by FLETCHER PRATT, widely known as a commentator and author of many military and naval histories dealing with the two world wars.

THE TORPEDOES THAT FAILED

by FLETCHER PRATT

I

ON December 14, 1941, the submarine *Sargo* fired a torpedo at a cargo carrier of the Japanese invasion fleet bearing down on the Philippines. The torpedo missed. On December 24 *Sargo* got into a Japanese convoy and fired five torpedoes. They all missed. On December 27 she fired torpedoes at two freighters. They missed. On December 28 she fired at a transport and later in the same day at another cargo carrier. The torpedoes missed. On December 29 and January 1 she made three more attacks. All the torpedoes missed.

On October 19, 1942, nearly a year later, the submarine *Guardfish* made a five-hour approach on a large freighter under airplane escort in the East China Sea. Four torpedoes were fired, of which two were seen to run under the target. The submarine immediately fired her two remaining forward tubes. One torpedo ran under the target; the other exploded prematurely before reaching it, and the submarine was forced to dive to escape the counter-attack of the planes.

On April 8, 1943, the submarine *Tunny* got into a Japanese carrier formation off Truk at night and, in a brilliant piece of maneuvering, worked into a position from which she almost simultaneously fired her six bow tubes at one carrier and her four stern tubes at another. All four stern torpedoes exploded and three of the salvo of six, but the explosions were all premature and the carriers escaped.

On November 9, 1943, when the war had been going on for nearly two years, the submarine *Seawolf* attacked the large Japanese transport *Akatsuki Maru* in the South China Sea, firing a total of eight torpedoes at her. Two of them ran under the ship; four struck her but failed to explode, and the vessel escaped.

These four cases happened to be rather spectacular, but they were by no means atypical. The commander of Submarine Division 102 endorsed the

patrol report of one of his boats with the remark that 37.5 per cent of all the torpedoes fired were defective. There is no doubt whatever that the war was sensibly lengthened by the failure of American torpedoes to behave as expected. When the American submarines got really good torpedoes early in 1944, the Japanese cause began to go to hell in a hurry.

Was this condition inherent in the torpedo as a weapon, or were our torpedoes worse than those of our enemies? The answer to the second question is not simple or easy to recover, but if it has to be put in a single word — yes. The Germans had a lot of trouble with their torpedoes in the early months of the war, but it didn't take them anything like two years to find out what was wrong and to apply the cure. The Japanese never did get an airplane torpedo as good as ours, and some of their submarine torpedoes malfunctioned. The one that sank the carrier *Wasp*, for instance, was a mechanical failure; it leaped out of the water, but it just happened to go off against a portion of the ship's side behind which a gasoline line was running. Their destroyer torpedoes, however, remained right to the end of the war superior in range and hitting power to ours, and their submarine torpedoes never approached 37.5 per cent failures. In any case, the failures of other nations afford small excuse for those of our supposedly mechanically-minded and technically competent nation.

Why these failures occurred is a rather complicated story of official lassitude, official reticence, false economy, and inadequate research. It has long been covered by the necessities of the war, but it deserves rather close attention lest the same sort of thing happen again. The submariners, who were out on the firing line undergoing the heartbreaking experience of seeing perfectly planned attacks go

wrong through the failure of their weapons, place the major blame on the incompetence of the Bureau of Ordnance, which has charge of torpedoes, and let it go at that. The Bureau of Ordnance, which, like all official procurement bodies, never has money enough to do what it wishes, places the major blame on lack of funds. The two agencies unite in allocating part of the fault to the Office of Naval Intelligence, which has charge of guarding secrets.

2

BEFORE examining the case it may be well to see what a torpedo is. The Mark 14 submarine torpedo, with which all but the oldest submarines were supplied at the beginning of the war, was a device costing something over \$10,000, 21 inches in diameter, a little over 21 feet long, and 1½ tons in weight. In effect it was a robot submarine. A spray of water forced by air pressure through an alcohol torch became steam, which operated turbines that drove the torpedo through the water at a speed of 46 knots to a limit distance of 4500 yards. It could also be set to travel nearly double this distance at a speed around 30 knots, but this setting was rarely used and was dropped out of most torpedoes late in the war. Gyroscopic controls could be set to give it any desired direction after leaving the tube. The depth at which it ran was controlled by a valve reacting to water pressure, and this could be set before firing to give any desired depth.

The business end of the Mark 14 was its war head, containing 507 pounds of TNT. It could be set off by banging into the side of a ship (contact exploder), or by entering the magnetic field of a ship's steel hull (magnetic exploder). Neither type of exploder was operative until the torpedo had run 450 yards — an arrangement designed to protect the submarine against the premature explosion of her own torpedo, since a torpedo runs very erratically during the early part of its course, seeking the depth and direction for which it has been set. The shock of sudden changes might make it go off.

Much of the torpedo trouble traced ultimately to the magnetic exploder, which has a long history. Toward the end of World War I the Germans began using a magnetic exploder in mines, and an improved and developed form of it was the first and greatest of Hitler's secret weapons in World War II, the magnetic mine which sank so many ships in the English Channel in the fall of 1939.

The heart of the German device was a compass needle which swung when approached by the mass of iron represented by a ship, the movement of the needle making an electrical contact which set off the explosive. During the twenty years between wars it occurred independently to Germans, Americans, and British that if this device could be ap-

plied to torpedoes, and the torpedoes then be fired to pass directly beneath a ship, the results would be sensational. The underwater side of a warship carries armor and compartmentation to deaden the shock of torpedoes. Not so the bottom; and in addition there was a better than even chance that an explosion beneath a vessel's keel would break her back.

The official, stated view on the subject was that such a beneath-keel hit would be three times as effective as one against a ship's side. This turned out to be an error; it was based on the idea that torpedoes would be used almost exclusively against armored warships — battleships, cruisers, carriers — and it contained a miscalculation, the first of several gaps to develop between theory and practice in the story of the torpedo. In 1943 the Bureau of Ships completed an investigation of how vessels went down under torpedo attack, and it was found that in a majority of cases they capsized; that is, a side hit which let water in to unbalance a ship was more effective than a bottom hit.

Also, as early as the Norwegian campaign of 1940, the Germans discovered that their magnetic exploders were not working at all well in sub-Arctic waters, because of the fact that the earth itself is a huge magnet, whose magnetism varies in kind and degree from place to place. Before the end of that year both they and the British decided that their magnetic exploders were so untrustworthy that they should be discarded. Before the end of 1942 Doenitz was prodding his scientists to produce one that would work.

The American magnetic exploder had been "perfected" as early as 1925, on lines quite different from the German. It gave satisfactory results in tests, and our people thought they had the only magnetic torpedo exploder in the world. The theory was that this torpedo, three times as efficient as any other, and knowledge of whose very existence would affect the design of potential enemy ships then under construction, should be held a deadly secret, to be launched at the enemy in mass and as a surprise.

When Admiral W. H. P. Blandy (later to command the Bikini experiment and the Atlantic Fleet) became head of the Bureau of Ordnance in February, 1941, he failed to agree with this theory. He pointed out that the general lines of scientific development are known on a world-wide basis, and that technical secrets keep about as well as eggs — that is, you can hold them under refrigeration for a time, but not a very long time. In the meanwhile it is slightly important that the people who are going to use the device know something about what they're handling. In April, 1941, after Admiral Stark had already written to his Fleet commanders that "the question as to our entry into the war now seems to be *when* not *whether*," the new Mark 14 torpedoes were issued to the Fleet.

But even then only the captains and torpedo officers of submarines were told about them, with the warning that they must keep the matter very secret. Parenthetically, destroyers got torpedoes with magnetic exploders at the same time and it turned out to be a good idea that the issue was not delayed till the outbreak of hostilities; in at least one destroyer squadron the current tactical system called for firing torpedoes under our own ships to hit the enemy. The restrictions on knowledge of the Mark 14 were later relaxed to the extent of allowing enlisted torpedo men to receive enough instruction in the mechanism to be able to handle torpedoes containing the magnetic exploder. But at least during the early part of the war no one in the Fleet knew the inner workings of the magnetic; there was no one who knew how to service it if it got out of whack, or what appearances would indicate a magnetic exploder was not in perfect condition. When the war began, there was no one in the Fleet who had any experience with the new torpedo under service conditions. The submariners went to war with a sword whose weight and temper they had never tested, and it would be surprising if they had not sometimes mishandled the weapon.

3

THE failures traceable to the magnetic exploder were primarily responsible for the difficulties of *Tunny* and *Guardfish* mentioned above. For a long time, however, they were overlaid by another set of performance failures, quite different and, on the whole, more serious in its effects. The faulty magnetic exploder could be deactivated, put out of business, and this was often done. The torpedo thereupon became an ordinary contact weapon. The other, the major, defect prevented torpedoes from hitting their targets at all. It was this: the Mark 14 consistently ran anywhere from 10 to 15 feet below the depth for which it was set, and it sometimes ran out of line as well. Yet every torpedo supplied to the Fleet was tested by the torpedo station at Newport and certified as sound.

It may be noted in passing that in the early part of the war the Germans experienced some difficulty with deep-running torpedoes, and from one of the same causes. On older torpedoes the hydrostatic valve which controlled depth running was well forward on the fat part of the torpedo. With the increase in range and speed achieved between wars, the space there was needed for other things. It was also felt to be an advantage to place the controlling mechanism nearer the rudders it was to control, so the valve was moved aft to where the torpedo thins down toward its tail. It occurred to no one, German or American, that thus setting the valve at a slight angle to the torpedo's axis of progress would cause it to react to another depth than that for which it was set.

As a matter of fact, this difference was quite small, and as long as torpedoes were run at fairly shallow depths and in smooth waters, the normal testing conditions, it did not matter. Moreover, the depth recording instrument by which the performance of the valves on American torpedoes was checked turned out to be faulty. No one knew it for years, because the recorder erred in the same direction and by the same amount as the valve. This was straight hard luck; it was like using two adding machines to check each other and having both of them make the same mistake for quite different reasons — a peculiar coincidence.

To this was added another source of error in 1940, when reports from the war zone indicated the need of heavier explosive charges in torpedoes. Careful tinkering enabled the Ordnance people to pack another 115 pounds of TNT into the war head of the Mark 14. By mid-1942 the figure became still higher, but the exercise heads with which the torpedoes were tested before being sent to the Fleet were not changed. Partly this was because no one conceived that a mere 115 pounds would make much difference in an object weighing well over a ton and moving at well over 50 miles an hour. Partly it was because of a design difficulty. A normal exercise head was filled with water, which the torpedo automatically ejected at the end of its run so that it would float and could be picked up, water occupying about the same space for weight as TNT. But the extra explosive had been crowded into the Mark 14 war head by increasing density, so that the water-filled head, though occupying the same space as the TNT war head, no longer had the same weight.

Yet as the tests gave apparently satisfactory results, no inquiry was made into the question of whether the tests themselves had not fallen out of relation to the service conditions under which the torpedoes would be used — at least until the torpedoes began to fail in alarming numbers.

This was not entirely the fault of the Bureau of Ordnance. They had few or no submariners on hand to point out the differences between the test conditions and those encountered in service. It is the practice of the Navy, and not an unsound one, to allow officers to choose their line of duty so far as possible. A submarine officer's duty-life in this specialty is very brief; he is old in the service at thirty-five and out of it by forty. None of the young men in that most active of branches wanted to spend two or three years fooling around with slide rules at Newport while their classmates were running up records of sea service. Nobody in the upper echelons thought of ordering submariners to Newport whether they wanted to go or not.

Even if the submariners had been on hand it is doubtful whether they could have done much about the real difficulty, which was the conditions under which the tests were conducted and the

atmosphere with which they were surrounded. The only torpedo station was at Newport and the range there is too shoal to permit real deep-running tests. The torpedoes were tested by being fired from a "torpedo barge" instead of from the tubes of submarines.

On top of this the emphasis was always on saving money. It was important to recover those \$10,000 torpedoes in good condition after a trial run; there were only so many of them. If they ran under a target, what the hell; they were to be used with the magnetic exploder in any case, and a near-miss underneath the ship was three times better than a direct hit. Above all, tests must be conducted against a target that would permit recovery of the torpedo; the United States could not afford to expend ships by firing live torpedoes against them, and could not afford the torpedoes to fire. Behind this was the attitude of the Ordnance officers. They tended to look at a torpedo not as an expendable piece of ammunition but as something they could not bear to destroy.

The Germans and Japanese, to whom everything was expendable for military purposes, could and did afford actual torpedo explosion; that was one of the reasons why they got better torpedoes. There was also an administrative responsibility. The Roosevelt administration did not stint in providing funds for big, beautiful ships, but it was extremely niggardly about allotting funds for research. During the years of darkening war clouds the Bureau of Ordnance never once received as much as it asked, and it was constantly engaged in an effort to reopen the second torpedo station at Alexandria, Virginia, which had been set up during the First World War.

This effort succeeded in 1939, after Europe had already begun to burn, but too late to prevent another factor in the malfunctioning of the torpedoes that went to the Fleet in 1941. A torpedo is an extremely complex mechanism. Those produced at Newport were practically hand-tooled. Suppose one was fired for testing and after it was removed from the water some small part was replaced. It was no longer exactly the same torpedo. Even though the difference could be expressed in a fraction of a millimeter, it became important when multiplied by the distance a torpedo must travel in action.

The Bureau of Ordnance realized this from the beginning and, more importantly, realized that its stock of torpedoes was nowhere near sufficient to run a war with. In 1941 the United States owned fewer torpedoes than it was expending every month by 1944; and of the small number we did have, 233 — nearly half — were destroyed when the Japs bombed Cavite. Along with the effort to reopen Alexandria went one to get some machine tools installed and to put torpedoes into mass and standard production. Of course, everyone was

yelling for machine tools in 1939, so the process was a slow one, and it was not until the war was several months old that International Harvester Company and American Can Company began work on machine-produced torpedoes, with identical spare parts that could be fitted to any other torpedo without special adjustment.

4

THE resulting early shortage of torpedoes, most acutely felt among the submarines operating out of Australia in the early days of the war, produced still another source of submarine attack failures in the form of an order not to fire spreads. A spread consists of several torpedoes fired along slightly different angles like the spokes of a fan in order to make sure of getting a hit on a vessel which may be maneuvering rapidly, and to allow for errors in computing the target's course and speed. The normal torpedo attack for a large valuable vessel, as used later in the war, consisted of a spread of three or four. But when *Sargo* made her famous and fruitless cruise at the beginning of the war, she was using singles.

Nevertheless, it seemed to that submarine's commander, Lieut. Cdr. Tyrrell D. Jackobs, that with all allowance for human error and the normal run of mechanical imperfections, the mere law of averages should have given something better than thirteen misses out of thirteen shots. He suspected deep running and requested test firing of torpedoes to check the depth control of the Mark 14; and he was not the only complainant. Check firings were made at Newport; in February, 1942, the Bureau reported back to the Fleet that the Mark 14 showed a tendency to run deep, but only to the extent of 4 feet and only during the first 880 yards of its run. Their depth recording device was still giving the wrong answers.

Now this 4 feet would hardly have mattered if the magnetic exploder had functioned properly. But with most of the bugs in that device still unsuspected, attention became concentrated on depth control. When in the spring of 1942 the submarines *Salmon* and *Skipjack* reported their belief that their torpedoes were running deep, Rear Admiral Charles A. Lockwood, Jr., newly appointed commander of Submarines Southwest Pacific, decided to make some tests for himself. He set up a big fishnet in deep water at Frenchman's Bay, near Albany, Australia. A service torpedo from *Skipjack's* stock was fitted with an exercise head devised on the spot, containing a calcium chloride solution considerably heavier than water and having the exact weight of a war head, then fired from a distance of 850 yards with a depth setting of 10 feet. It went through the net 25 feet down, and the next day two more torpedoes cut the net at 8 and 11 feet deeper than they were set.

The report on this performance reached the Bureau of Ordnance almost simultaneously with one from Admiral R. H. English, commander of Submarines Pacific at Pearl Harbor, that a test he had made showed torpedoes running at least 8 feet below their settings. In July the Bureau replied that the Albany test was not conclusive, since improper trim conditions had been introduced by using an exercise head that was shorter than the war head. This was not quite the brush-off it seems. When Admiral Blandy took office in the Bureau, almost the first subject that attracted his attention was the unsatisfactory state of the torpedo matter, both as to quality and quantity. He called out of retirement the best torpedo design man he knew, Commander James L. King, and made him head of the Subsurface Warfare Branch in the Research and Development Section. It was King who had succeeded in packing the extra power into the Mark 14's war head, and earlier it had been King who devised the turbine engine that drove our torpedoes, a far better engine than any one else in the world had.

Captain King (he had reached that rank by 1942) was a technician and design man who wanted scientific accuracy. He was already concerned with the difference in weights between the exercise heads and the war head of the Mark 14, and when the reports from Albany came in, he had developed a chemical liquid of the proper density and was building a new exercise head with it as a base. He secured the services of a submarine for firing, and shot his torpedoes through nets instead of trusting the depth recorder. At about the same time a second series of tests was run off at Albany with calcium chloride heads extended to war head length. Both sets of tests yielded the same results, and they were conclusive. On August 1, 1942, the Bureau of Ordnance advised all interested parties that the Mark 14 torpedo ran approximately 10 feet deeper than set; and after that date the curve of Japanese shipping sunk took an upturn.

The upturn was not really satisfactory for some time to come, since a differently calibrated depth control valve had to be designed and installed. The Bureau continued to get reports about torpedoes that ran close under ships or even hit them directly without going off, as in the case of the *Guardfish* attack cited above.

The American magnetic exploder was not a compass device, like the German, but operated by induction coils whose electromotive force was changed by passing through a ship's magnetic field, the change being boosted by vacuum tubes to actuate the firing pin. As the complaints continued and it became evident that depth setting could not be responsible, the Newport station realized the fact that had earlier struck the Germans: that a ship's magnetic field is not the same

in all parts of the earth. Captain King held more tests, and in April, 1943, the Bureau reported that the torpedo was apt to explode prematurely when running at 12 feet or less below the surface. It advised that the magnetic exploder ought to be inactivated unless the torpedo was being fired for the keel of the target in all waters south of 30 degrees, North magnetic latitude. It was also suggested that the magnetic exploder would work better if the torpedo could be allowed to run 700 yards instead of 450 before becoming alive.

These recommendations went to Admiral King, who himself had a background in submarines. He rejected the 700-yard period as unacceptable (submarines often have to fire torpedoes at closer range than this) and passed the rest to Admiral Nimitz, who promptly ordered that all submarines under his command should inactivate their magnetic exploders for keeps and fire for contact hits only. The Southwest Pacific submarines, which were under another command, kept the magnetic exploder for some time; that was why *Seawolf* had her unhappy experience in November. To complete this part of the story, Admiral Blandy farmed out the job of finding a really workable magnetic exploder to four separate research agencies, and one of them finally produced the goods — but only at the very end of the war.

5

THE curve of Japanese shipping sunk now turned upward again, but the torpedo troubles were not yet ended. On the very day that Admiral Nimitz issued his order to put the magnetic exploders out of business, there was a dramatic exhibition of another type of defect that had been in the Mark 14 all along, concealed by more obvious troubles. North of Truk the submarine *Tinosa* came upon the largest tanker in the Japanese service and perhaps in the world, *Tonan Maru No. 3*, 19,262 tons, a former whale factory ship. Two torpedoes were fired from a difficult angle; both hit, one exploded nicely and brought the giant tanker to a halt, settling slightly by the stern. It was insufficient to sink so big and well-compartmented a ship. Lieut. Cdr. L. R. Daspit of *Tinosa* maneuvered his submarine in to 875 yards broad off the tanker's beam and, during a period of several hours, poured ten more torpedoes into her, firing for contact. Every torpedo hit — they could hardly miss at that range and angle — but not one went off. After the tenth failure Daspit took his one remaining torpedo back to Pearl Harbor to find out what was wrong with it, while the Japs towed their damaged tanker home and salvaged her.

Examination of that one remaining torpedo failed to disclose anything wrong with construction or adjustment. But it seemed to Admiral Lockwood, now commander of Submarines Pacific,

that this could hardly have been the only sheep in a flock of goats. If it were not, then there must be something wrong with the contact exploder as well as the magnetic. Without waiting for Newport or scientific accuracy, he ordered two torpedoes fired against some submerged cliffs. One of them produced a perfectly lovely explosion; the other was a dud. Divers fished up the dud for examination. Like the *Tinosa* torpedo, it was found to be perfect in construction and adjustment; the exploder had released the firing pin correctly, but the pin had not struck the primer cap hard enough to cause an explosion.

Why?

The officers at the Pearl Harbor submarine base loaded several torpedo war heads with concrete, fitted them with contact exploders and primer caps, and dropped them down a wire for 90 feet onto steel plates in a dry dock. When they hit the plates squarely, nose on, in the position *Tinosa's* torpedoes had hit *Tonan Maru No. 3* and *Seawolf's* had hit *Akatsuki Maru*, seven out of ten were duds; but when the plate was tilted so that the blow was slightly glancing, the exploders worked every time. Just five days before, the Bureau of Ordnance had conducted similar tests by firing torpedoes directly at an armor plate suspended under water in Chesapeake Bay. Half of these also failed to go off.

This made the rest of the analysis relatively easy. The trouble lay in the firing pin itself, a device of several ounces in weight which, when released by a hit, was driven by a spring against the primer cap. The point was that when a torpedo running at high speed made a head-on hit, part of the tremendous force generated — something like 500 times gravity — appeared as friction between the firing pin and the guides along which it rode for accuracy. This friction was so great that the spring was unable to drive the pin home. But as soon as the difficulty was discovered and the pin lightened, the trouble disappeared; the sinkings of Japanese ships took another jump and never went down till the end of the war.

There had been a certain amount of suspicion about this firing pin early in the game. As far back as the late thirties the Newport station tested the contact exploder by hurling torpedoes from a catapult against a steel plate backed with sand, and found that in many cases the spring did not drive the firing pin home. At that time the spring was strengthened and appeared to give satisfactory results, but torpedoes had not yet attained a water speed of 46 knots. The greater impact developed by high speeds produced more friction and set things back to where they were before. If Lieut. Cdr. Daspit had set his torpedoes for slow running or glancing shots, they would have functioned perfectly.

Now it is not altogether fair to blame the Bureau

for not suspecting something was wrong, nor even to blame the Office of Naval Intelligence in its passion for secrecy. The data furnished to the researchers were both inaccurate and incomplete.

In the Fleet the man in command is held responsible and his complaints about imperfect instruments are taken at a heavy discount by headquarters. They have to be, or every failure would be blamed on the tools. Just before the *Tinosa* report the Bureau of Ordnance was in receipt of a report from Admiral Lockwood to the effect that out of 600 torpedoes evaluated as known hits only 1.5 per cent had failed to explode. So the responsibility is divided.

What the Bureau of Ordnance could have done was to get rid of its psychological block against the expenditure of valuable material and to conduct tests under conditions approaching those of service. It could have fired real torpedoes at steel plates and steel hulls. It could have wasted some torpedoes in discovering that the magnetic exploder would premature at depths of 12 feet or less and that it was affected by changes in magnetism. It could probably have insisted that some active submarine officers be detailed to Newport.

This is demonstrated by the story of the electric torpedo. The first one was a German job, captured in 1942, which was turned over to Westinghouse for duplication. It didn't work; some of the parts were not suitable for American manufacture and there was no way it could be adapted to fit American tubes. It was 30 per cent slower than the turbine torpedo and it had more bugs in it than a Latin American jail. But it showed no wake (thus preventing an attacked ship from dodging an approaching torpedo and preventing escorts from running back along a torpedo track to depth-charge the submarine), it would run reliably at any depth without preliminary diving and hunting, and its exploder worked every time.

Admiral Blandy demanded real submarine officers at Newport to help work the thing out, headed by Lieut. Cdr. H. A. Pieczentkowski, who had been largely responsible for the contact exploder tests at Pearl Harbor. He was one of the best submarine commanders in the Fleet and Admiral Lockwood was reluctant to let him go, but eventually he turned up at Newport, working with Captain King. There was a constant interchange between scientific accuracy and practical experience under combat conditions. By the end of 1943, electric torpedoes were going out with the submarines, and in 1945, 65 per cent of all torpedoes fired were electrics.

This seems to be the answer. The research men aren't practical enough, and the practical men tend to stick with what they have already. There has to be a constant interchange between the two groups, and we can only hope that the lesson has been learned.



*The college graduates and the young intellectuals of China are faced today with some terribly difficult decisions. No one knows this better than NORA WALN, author of *The House of Exile* and *Reaching for the Stars*, who has been living and writing in the Orient for the past two years. In her third Atlantic article she wrote of An-kuo, the young Chinese scholar who for a time took refuge in Japan but went home because he felt he was needed. In the following article Miss Waln reports the reaction of the Chinese people to the Communist conquest.*

THE RUSSIANS IN CHINA

by NORA WALN

1

FLOWERS and a visitor have come." As I got out of the elevator at the third floor of the Tokyo Correspondents' Club, Kiyoko looked up from ironing my blue blouse on a table which she had set in the hall. "Yellow iris and white carnations. I put them in water. Our visitor is the tall Chinese, Pi-feng. He's reading a book."

Pi-feng was sitting by a window with his feet drawn up under him on the chair, in the way that a Chinese sits when at ease. He had taken off his outdoor shoes and put on the satin house slippers which he carries in the pockets of his long gown. We greeted each other without ceremony, and while I hung up my coat he went on reading. The sun had climbed over the ugly smoke-stained building opposite my windows and was sending a beautiful light into the room, where Kiyoko had arranged the flowers.

"We've had a message from An-kuo," said he, laying down his book, which I saw was G. B. Sansom's *The Western World and Japan*. "The message came by radio, heard by the monitor who has taken over his work here." (An-kuo is a young Chinese student who recently left Tokyo to go back to China.) "He reached home safely and now he's gone to northern Anhwei Province to do whatever he can for people suffering from the flood and famine there. Sometimes I think I ought to leave college without getting my degree, as he did, and go home to help."

Before I could say anything, my guest continued, "Chu-yin has come from Manchuria by way of Tientsin and wants to see you. He called on me this morning to ask for your address. As I couldn't get you by telephone, I came over to tell you that I arranged for him to have supper with us at six o'clock."

"That's good," I said. "It will be wonderful to see him."

"We should eat here, rather than in a public restaurant," suggested Pi-feng. "We can talk more peacefully."

"That will be best," I agreed, and asked, "What do you know about the famine?"

"The monitors here who listen in on the Communist China radio sent you a copy of what was broadcast by the Peking Famine and Flood Relief Committee." He handed me a paper and I read:—

"The total area affected by famine in eastern China is about 52 million Chinese acres. The district where crops have completely failed is roughly 2 million acres. An estimated 1.38 million houses have been damaged, and over 3000 people drowned in the flood. Another 30,000 have died as a result of famine caused by the flood, and close to 36 million people who have been made homeless are threatened by starvation. The greatest suffering is in northern Anhwei Province. Most of the people in that area are living as best they can on grass and bark. Those who can get to a place where there are buyers are selling their wives and children into slavery so that they can have food, although the law forbids this. Conditions are a little better in central Anhwei. In Shantung Province approximately 2000 have already starved to death and 3 million have less than is needed to support life adequately, while over 1.5 million are wandering hungry and cold. In northern Kiangsu Province, in Chinkiang, in Fukien Province, and in certain parts of the Yangtze there is serious famine following on terrible floods."

Pi-feng was watching me. When I finished he said, "My recent letters from home substantiate these reports, although they give no figures. What have you heard?"

I told him that the same story of need had been written to me and we were both silent, thinking of experiences that we had had in China in previous times when widespread famine was on the good

earth, caused by the devastations of civil war and neglect to repair the waterways. The cries of whimpering children were in my memory, as in his. The stench of disease and death came back to my nostrils. I saw again, as I returned his stare, the dead and dying — the kites hovering over bodies not yet cold and over weak people wandering in search of food or, unable to move any further, sitting in huddled groups along the highways.

"The conditions that caused the famine now are certainly the same as in the past." Pi-feng had the look of being far away. "Ours could be a rich land if we could have a quiet and orderly government. We are an industrious people, an intelligent people." He was still for a long time and then he went on, "My mother has written that in our neighborhood there is evidence that Mao Tse-tung made agreements at Moscow by which machines for the industrialization of China are to be paid for with raw materials and food. Food has been collected, packaged, and labeled to the Soviet Union and sent out on freight cars. This seems a bargain we cannot afford."

Soon after this, Chu-yin arrived. I had not seen him since I was last in China about a year and a half ago, and I was distressed at the rapidity with which he had aged. Then he had been full of hope; now he seemed old and tired. He brought me greetings from mutual friends. I made green tea of the variety used in China before meals, whenever there seems to be a need of rest, so as to prepare the stomach for food; and after he had put his slippers on as Pi-feng advised him to do, he drank, then dozed — resting from the worries of the day.

2

CHU-YIN was born and grew up north of the Great Wall of China in the region called Manchuria. When he was a boy, the Manchus still ruled over the Chinese Empire as they had done for nearly three hundred years. They had not permitted extensive agriculture, such as is practiced in China, in their homeland north of the Wall. They kept the virgin forests standing and the grass of the wide pasture lands unbroken by the hoe. They were nomad people, horseback men, when they surged down to the passes in the Great Wall to conquer the industrious farmers and shopkeepers settled south of the barrier. But the Manchu power was breaking at the turn of the century, and soon Sun Yat-sen, American-educated Chinese, led a successful movement to unseat the "Sons of Heaven" at Peking. The headquarters of his movement were in Japan, and his party aimed to establish a republican form of government patterned after the United States.

Chu-yin was twelve when the Republic of China was proclaimed. The deposed Manchus were not permitted to return to their homeland, which was declared a part of the Chinese Republic, and the

gateways through the Great Wall were opened to Chinese emigration. The crowded farmers of Shantung surged north to break the soil with their hoes. Below the matted grass they found rich earth in which the soybean and other crops thrived. Chu-yin's father, who had been a poorly paid minor clerk in a government office at Mukden during the Manchu rule, was a Chinese from a farm family in the Yellow River valley. He took up land and prospered.

With the profits he made on the land, Chu-yin's father bought a flour mill in Mukden. Occidental ideas were popular then and Chu-yin was sent to St. John's University in Shanghai, then to a technical college in Japan for two years, and finally to the University of Chicago. My husband, who is an Englishman, was in Chinese government service from 1904 to 1932 and he first met Chu-yin's father while acting as postal commissioner at Mukden in 1913 and 1914. I came to know Chu-yin and his family after I married my husband in 1922.

When he returned from America with a technical education, Chu-yin possessed the abilities which were at a premium then. He had a good job in the first steel mill in Manchuria and in a few years possessed industries of his own. I happened to be visiting in his house in 1931 at the time of the Mukden Incident, when we woke in the morning to learn that the Japanese had taken over the government.

Chu-yin is an Oriental with a warm heart. When he was a little boy he had full knowledge of the poverty of his grandparents and others of his clan. His parents, even while his father had only a minor clerk's salary, always sent a percentage of their earnings back to the clan home and he went there for visits, on which he saw the poverty of others all round him. More than once in his lifetime he witnessed flood and famine in the Yellow River valley and tried to help.

Ever since he saw the United States, he has believed that industrialization is the answer to the Orient's hunger problem. Therefore, he did not fight against the Japanese industrialization of Manchuria. He took no part in the continuous three-power squabble over control of the railways, but he had pride in the service maintained. He says that in the early years after he returned from the United States it did not seem to matter to him whether the Japanese, the Russians, or the Chinese owned these fine tracks with their good rolling stock, so long as people were served by them. He refused to be brought into political issues. From 1932 to 1941, he gave his talents and his knowledge wherever he could help to develop Manchuria into a region where natural resources were used to improve humanity's livelihood. He liked to visit new mines, go through factories, and watch the growth of hydroelectric power. He had satisfaction in the whole industrial structure.

He did not like Japanese manners in Manchuria.

Those in power there too often treated the Chinese as inferiors, but he knew that not all Japanese are like this. While he was a student in Japan he lived in a Japanese family — the same family with whom he stays every time he comes to these islands — and he is a person whose friendships are enduring, once he has entered into a relationship of mutual trust and affection. In his work in Manchuria, he met the overbearing attitude of the Japanese with patience for many years. Chinese working there were comfortably off in material ways. They had enough to send money and substantial presents of food to their kith and kin south of the Great Wall. In social life Chinese were kept at a distance by the Japanese who were their overlords. He really would have liked to have a closer relationship with the people from the four islands, but he did not happen to meet in his work any Japanese who became his friends.

Chu-yin had admiration for their technological ability and he wished that China proper could be developed in this manner. He knew that a number of key operations were withheld from the Asian mainland and done within Japan so that no insurrection could seize a complete industry. He dreamed of a time when Chinese would rise to power, gain control, and build the machine-tool shops needed to service the mines and factories. He had Chinese pride which made him feel certain that there were plenty of Chinese technicians who could fill this gap at some later day. Although the Japanese were winning to a certain extent in their military maneuvers south of the Great Wall, he had faith that China would undermine and overcome Japanese power.

His resentment did not flame into active anger until the day of Pearl Harbor. He explains the stir of his repressed emotions in this way: At St. John's University and at the University of Chicago, he had come to feel a love for the United States second only to his love of his native land. From the morning of December 7, 1941, he was at war against the Japanese with all his talents, intellect, and cunning. He left Manchuria and gave his services to Chiang Kai-shek and, his heart breaking, became disgusted with the Kuomintang. At the end of the war, his emotions were in confusion.

He was that way when I visited China in 1947, shortly after my return to the Orient from Europe. His wife and his children had hope then that the political tangle in China would be unraveled and civil war come to an end through compromise between good men in both parties — Kuomintang and Communist. They were glad to be all together again in their own home. They had enough money for the present, and they trusted "Papa" to get the family business going smoothly. There were three grown sons ready to help him.

In 1948 and 1949 when I saw Chu-yin, he had faith in the future. He had begun to be enthusiastic

about Mao Tse-tung's intentions and abilities although he knew about them only through relatives who had been with Mao ever since Yen-an. When the Chinese Communists came to power in Manchuria, Chu-yin wrote me that dawn was lighting the sky for all China.

3

PI-FENG read the words of the Englishman Sansom, Chu-yin dozed, and I remembered while the late afternoon advanced to evening. Kiyoko interrupted our quietness to ask about supper. Until she had served and cleared the meal away, Chu-yin did not speak much. Then he gave Pi-feng and me a picture of events in China as he had seen them in recent months.

"China and the Soviet Union have a common boundary all the way from the Sea of Japan to the Pamir Mountains" — we knew that he meant to instruct us. "China and Russia touch on a borderland of more than four thousand miles. Never in our history has there been complete peace between us. Through the centuries, the men of the north and the men of the south have feared each other."

Pi-feng shared Chu-yin's knowledge. "The Great Wall of China, costing millions of lives in the labor of its erection, was built because of that fear," he said. "No barrier has ever been effective. The Wall has been broken and repaired, pushed further south and built further north era after era, and now, in the time when men can fly, it's of no more than picturesque, historic importance. If we could have peace between us — if understanding could develop — it would be a miracle."

"Manchuria, north of the Wall and south of Siberia, could be the model land." Chu-yin lifted his head. "How can we make it so? When the alliance between the Chinese Communists and the Soviets was announced it seemed as if we had started on the right way. I'm not a politician. I'm a technician, an industrialist, and I am a man who can never forget that he came from the lowly people. I was born in Manchuria but my roots go back, south of the Wall, into the Yellow River valley. When there's famine in my land, my heart is disturbed, my mind not clear."

"What has happened in Manchuria to distress you?" asked I, because I wanted to bring him back to that province. "Isn't the rebuilding of industry going well there? Won't prosperity in Manchuria relieve the problem in Shantung?"

"I don't know. I'm puzzled." And then, "Before that could be tested, we would have to succeed in building an industrialized Manchuria which was patterned to benefit the people." He was still for some seconds before he went on, "The Russians declared war against Japan just before the Japanese surrender. I was in the Yangtze valley. My wife and three of my little girls were at my father's farm-

house in Manchuria — they had left Mukden because they feared bombing — and they saw the horse-drawn carts going north, heaped with the machinery which the Russians pulled out of Manchuria as their 'lawful war booty.' I got back in the period when it seemed to me as if everything were smashed up. But when Manchuria came under Chinese Communist rule, an order was given for the industrial plants to be repaired, everything readied to receive back the Japanese machinery. I was given an important assignment in this work. We started on it at once in the mines, the factories, and every industrial establishment. Laborers undertook the work willingly, repairing broken cement, mending roofs, making order."

"Did they sing as they worked?" Pi-feng asked.

"Yes, they did."

"Chinese always sing when they're happy."

"Men and women worked together. There were no arguments. Everyone wore a twist of red cotton cloth — the men as a girdle, the women as an ornament in their hair," Chu-yin recalled. "The people were happy until the machinery began to come back. It was in bad condition. Many parts had been broken, as it was pulled out in careless haste by men who were not technicians, and it was further deteriorated by exposure during the time it was in the Soviet Union. There seems to have been no concern to put delicate parts under cover or to keep them from being bent and broken."

"Is it unusable?" I wanted to know.

"No. Much could be repaired, although considerable needs replacing. We need help from Japan before we can have industry going as we expected. These machines and all their parts were manufactured in factories on these islands. In Manchuria we do not have the machine tools necessary to make the replacements, nor do we have the patterns. The Soviets are not equipped to do this for us. I came over here as a tourist, on a visitor's permit, to make unofficial inquiry."

"What did you want to learn?" Pi-feng showed real interest. "Did you want to discover whether or not the Japanese would sell you what you need, if SCAP gave them permission?"

"You understand why I came." The older man nodded his head. "I'm staying in the family where I've always stayed when in Japan. They are industrialists. The heads of their house have been purged under SCAP order. They're not permitted, by decision of the Occupation, to hold the industrial positions they once had. But in and out of their house go those who have the job of making Japan the workshop of Asia again. I've met with politeness, with warm friendship and evasive answers which show me plainly that they do not care to cooperate at present with anything we may have undertaken in Manchuria. What do you conclude from the Japanese of your acquaintance?"

"I've been here in college nearly three years,"

was Pi-feng's answer. "Briefly, this is what I have concluded. Under the Occupation, the Japanese are docile. They are quiet, obedient, and eager to learn everything they can from the Americans. They're practical people, but not very imaginative according to my estimation. They examine everything, asking themselves 'Will it work?' In our college there's an active Communist group who are anti-American. They are very vocal and hard-working in spreading their philosophy. They claim that many of the laboring people here are Communists who would want to make things to sell to the Soviets."

"Do you think this is true?" Chu-yin was intent.

"I don't know how many laborers are Communists, as I have no contact with them. I think that if the American forces were withdrawn from Japan and this nation were free to make its own decisions, the conservatives would be in full power. They still have control of industry and I think that the majority of their laborers are loyal to them — this is only a surmise. I know there's alarm here, among all my friends, about the present situation. They say openly that they would clamp down immediately on Communist activities in these islands and that they would rather live under any privation whatsoever than rebuild in Manchuria a complete industrial machine. They are realistic. They don't want to increase their local danger by helping to build up a potential enemy, even if it means ready cash."

4

CHU-YIN's voice was slow. "There are Japanese technicians who have remained in Manchuria. They're working with us. Several of them are attempting to invent what we would need to set up shops to manufacture the necessary machinery. They are Red. They are not completely trusted even by the Chinese Communists, yet their talents are used. So far, they haven't invented anything usable."

"Can't the Russian technicians help them?" I wondered.

Chu-yin's shoulders drooped. "Soviet assistants began to arrive in Manchuria shortly after Mao Tse-tung went to Moscow. Those who have come are not so able as we hoped they would be and their presence has disturbed the people. As they get off the train, these Soviet citizens are poorly dressed, they seem dazed, and they look about them with wonderment. With every lot that has come, a transformation has soon taken place. They go to the tailors and order five or six suits of the best material. They are soon the most handsomely dressed people seen anywhere. They are getting high pay from somewhere. The Manchurians have concluded that the Soviets made an amazing agreement with Mao Tse-tung."

"Where and how do they live?" Pi-feng asked.

"Houses are commandeered for the Russians — the best houses near the factories and the mines. They want American-style homes with all American comforts and they want their clothes made in the Western way. They don't speak Chinese — they use interpreters. They stay separate from us and, as I said before, they are not competent in the repair of Japanese-made machinery. They want women provided them and they find women. Very few have brought their wives and children."

"What kind of money do they use?" the younger Chinese persisted.

"They have 'greenbacks' — United States bills. The shopkeepers are wary of this money. They fear that the bills are counterfeit and also, as there is an order against using any money other than that issued by the Chinese Communist Party, they are afraid to touch it. When they're forced to take it, as they are by their fear of the Russians, some of the shopkeepers burn it immediately even though they've given the goods demanded."

"What goods do they want?" I was interested in this.

"They want watches, typewriters, fountain pens, soap, perfume — Western-type luxuries. They aren't interested in curios or Chinese art. They are cleaning out Western goods."

"Was there much Western goods there?"

"There was considerable."

"Is this going on south of the Wall?" Pi-feng put in.

"I've seen it is, in places where I've been." Chu-yin suddenly tightened his voice. "This is a surface matter — it will pass. They're clearing the shops of Western goods — maybe because they want them, perhaps because they want to remove them from the people's sight. The serious problem is that our labor force is not working as it should be. They are upset."

"Why are they upset?"

"Because Mao Tse-tung seems to have agreed to pay the Soviets for their services and everything they give in food and raw materials. Word has reached the workmen that every piece of Japanese material taken by the Soviets and now returned has to be paid for by the Chinese Communists. The weather in Manchuria is cold, as you know. There's a long winter, the climate is vigorous, and people thrive there if they are well fed. Manchurians have been accustomed to a well-set table, for without plenty to eat they haven't the energy needed to meet the conditions. Even the lowliest have eaten rich food, fat and nourishing. They don't like to see the soybean hauled away. They count the loaded carts and cars passing across the border. They estimate the pounds of freight on every swift-moving train. This makes them sullen, slow-moving, incompetent in their work."

"Are the Russians a vast number?"

"Probably not, yet they seem to be everywhere,

making endless notes as the Japanese used to do, probing our earth for natural resources, estimating the lumber in the forests, the minerals below the fields, the fertility of the soil — even counting the fish in the lakes and rivers. They appraise the population — people's physical strength and mental capacity. They take photographs continuously. The people are frightened of them. They look different from us, they behave differently, and they are greedy about all material things. The Japanese looked down on us. It seems as if the Soviets do, too. We looked for comradeship with them."

"Have you traveled south of the Wall?"

"I went to meetings at Peking and Tientsin and I traveled to Shanghai, on to Canton, and back. You can't just go to the station and buy a ticket as we used to do. Anyone who's going to travel must get a permit from the local police in the district of his or her residence, but permission seems to be given quite freely and people are traveling. The third class is crowded. The second class is fairly full. There aren't many in the first class cars. Most of those who travel in the best class are government officials and others on government business. The Soviets all seem to travel first class. I have permission to travel that way because I am important in the industrialization program, but I often go by second or third because it's cheaper."

"People don't talk now on the trains as they used to do. There's a saying: 'Open your mouth to put in food; open your eyes to watch where you walk.' The people are quiet; most of them probably are those who were scattered by war and are now trying to get back to their home places. The railroads are in good condition, the trains run on time. I believe that the Soviets have been of great help in making our railway system efficient." He was suddenly very tired.

"I can't talk any more." Chu-yin's voice grew husky. "I've seen too much. I was born in 1900 and I've lived half a century. Famine in my native land — that's what I saw when I traveled south of the Wall. Flood, devastation, hunger, crops that weren't planted, harvest that wasn't got in, deep water that hadn't drained away, hillsides arid with drouth, the dead and the dying. Don't ask me which provinces they're in. I haven't the strength to tell you. Some Chinese are rich, some well off, some are only moderately prosperous, and among them all, in valleys and plains, in cities and towns and in the countryside, there is famine — the worst famine our nation has ever known."

Abruptly, he asked me for his outdoor shoes, which Kiyoko had taken to clean. Pi-feng took off Chu-yin's slippers and helped him put them in the pockets of his coat. I handed the shoes to Pi-feng and he laced them up. We got a motorcar and took him back to his Japanese friends. He did not speak until we were about to part and then, "*Tsai chin, tsai hui* — See you again, we shall meet again."



AN EXPLANATION

by PAUL DEHN

WHEN the pillars of smoke, that towered between heaven and earth
On the day we died, have thinned in the wind and drifted
And the hooded crow flaps home across the volcanic sky,
Somewhere beyond and below the littered horizon
(O from what green and golden island?)
Man, I suppose, will emerge and grow wise and read
What we have written in guilt, again with an innocent eye.

Then, if the desperate song we sang like stormcocks
At the first flash, survives the ultimate thunder
To be dreamily misunderstood by the children of quieter men,
Remember that we who lived in the creeping shadow
(Dark over woodland, cloud and water)
Looked upon Beauty always as though for the last time
And loved all things the more, that might never be seen again;

Who chewed the leaf, uncertain of seeing the hawthorn
Scatter its stars the length of a lane in summer,
Or fingered the sparrow's egg that might never be born a bird;
And wondered, even, whether the windflaw moving
Silently over the water's surface
Should gain the distant edge of the lake in safety
Before the inferno struck, whose echoes shall never be heard.

I sing to a boy unborn and unbegotten,
Who have no war-song, now, for his huddled fathers
In the lost light awaiting their time of eternal cold.
I know, I know that a legion of singers before us
Looked their last on much that was lovely
And perished as we must perish. But who will remember
That most of them wept and died only because they were old?

Mid-Atlantic

The rubber rafts flew up like kites in the gale; 30-foot waves battered the heavy motor lifeboat until it sank. How, under these conditions, to save the lives of sixty-nine men, women, and children in a foundering flying boat was the problem confronting CAPTAIN PAUL B. CRONK of the U.S. Coast Guard weather ship Bibb. It called for seamanship, instinct, courage, and luck. The Atlantic is proud to publish Captain Cronk's own account of the minute-to-minute decisions which had to be made in a situation that was all but hopeless.

THE RESCUE ON STATION CHARLIE

by CAPTAIN PAUL B. CRONK

1

OCEAN Station Charlie is a place of big waves. The incidence of waves 30 to 40 feet high depends on how often gale winds blow, how far the "fetch" of the wind is, and how long it blows from the same quarter. Here the pilot chart shows that the prevailing or everyday breeze averages 21 to 27 knots. Winds of that force tend to push you off your feet, but in the fall gales are the rule — one after another. The westerly gales of winter have a fetch of 800 miles, average 50 to 60 knots, and blow for days on end. Then the waves lengthen out as they gain height until the crests are 400 to 500 feet apart.

The Coast Guard weather ship's main hull structure is virtually submerged; the waves tumble in from the sides and over the stern onto the weather deck, even though the ship is hove to, with the wind ahead. The real beating comes with a one-two punch and a kick in the belly when the ship is lifted up by the first of "Three Sisters" for half her length and, as the wave crest passes aft, she falls like a 2200-ton teeter-totter and is jarred as though hurled on a reef. The next wave catches her defenseless, with her bow slanted down the trough, piles on board, and crashes against the bridge structure with a sledging impact that stops the ship dead.

The hundreds of tons of water have to go somewhere and they do — straight up. They come on the bridge and top of the wheelhouse like a great waterfall and then — wham! she gets it again. It is like a boxer delivering an uppercut, followed by a looping right hook, which flattens his opponent; whereupon he jumps upon him and kicks him.

"Three Sisters" are a series of three big waves that appear every so often when the long rollers get in phase with the short, steep, local waves. It is one of these that you hear about as the freak wave that boards a big ocean liner and smashes things up.

On October 10, 1947, at the Poole, Dorset, airport the flying boat *Bermuda Sky Queen* waited for her

sixty-two fares to come by train from Victoria terminal, London. This was quite the largest group of passengers ever booked for a transatlantic flight. It included thirty men, twenty women, and twelve children. Nine of the children were under eight years old.

The shortage of air transportation from Europe and the United Kingdom to America had been desperate. Many passengers had waited for months, and spirits were high at the prospect of the air voyage across the Atlantic on board the giant American "luxury plane."

On Sunday, October 12, the plane took off from Poole and set down the same day at noon at the airport at Foynes, Eire. Though it was scheduled to leave that evening, its departure was postponed because of reports of bad weather over the Atlantic. Fuel tanks were topped off and the plane was serviced. A few persons found their way to convivial evening gatherings on shore. At 3.40 on Monday afternoon, October 13, the plane took to the air with its sixty-two passengers and crew of seven, and the flight toward Gander, Newfoundland, began. It was destined never to reach Gander.

As the plane flew westward, skies were clear, and about 5.40 Greenwich time the sun went down. The plane flew on into the afterglow and the navigator scanned the eastern skies for the first stars. Celestial navigation was possible until 9.30; then overcast was encountered, which prevailed throughout the night.

At 1.55 A.M., October 14, in the vicinity of Ocean Station Charlie, about 100 miles west of mid-Atlantic, the *Queen* went on the air: "Nan Mike Mike Charlie. This is King Fox George, this is Nan Charlie Six One Two. Come in, please."

There was some delay in answering by NMMC (Ocean Weather Station Charlie) because the *Queen* was not alone in the starless and windy neighborhood of clouds. Aircraft NC 288 and Speed Bird *Gahen* were passing near-by, calling for information

on winds aloft and for radar determination of ground speed and position. Not far distant were planes bound for Gander; Shannon, Eire; Prestwick, Scotland; and London, England. These also checked with Station Charlie; not only were they required to do so by their operators, but it was a wild night and every aid was welcome.

At 2.05 A.M. the *Queen* received information on winds aloft, at her level of 6000 feet and her position, which was found to be east of the ocean station vessel by 65 miles. As she flew on, bucking the storm, she requested and received data on winds at the 4000-foot level, atmospheric pressure, and cloud ceiling.

At 2.32 A.M., somewhat behind flight plan schedule, the *Queen* passed the station vessel. The crew of the aircraft were "well satisfied with the progress of the flight and expected no difficulty." The chance to return to Foynes while there was still enough fuel remaining (point of no return) was lost during the period of obscured stars after leaving Station Charlie.

At 5 o'clock the overcast cleared and a celestial fix was obtained. This revealed a position considerably behind dead reckoning. The implications were serious indeed. No time was lost in getting the series of sights and time checks which revealed the awful truth — ground speed west of the station ship had been reduced by head winds of gale force to 59 knots and all chance of getting to either shore was gone.

Charles Martin, the 26-year-old ex-Navy pilot, was faced with a decision which, if wrong, would cost his life and the lives of his crew and passengers. The instinct to continue west toward the nearest land must have been strong. The decision to turn back seaward must have been a hard one to make. It was lucky for all those on the plane that Martin had the nerve to make that decision. The *Bermuda Sky Queen* would put about, home in on Station Charlie's beacon, and set down alongside the Coast Guard cutter on the sea. If the U.S. Coast Guard could not save them, no one could. At 0758 Greenwich time, corresponding to 5.58 in the morning, local sun time, the huge plane banked and turned and, with the westerly gale helping her along, made for Ocean Station Charlie, 310 miles back the way she had come.

On Station Charlie the U.S. Coast Guard cutter *George M. Bibb* was keeping her vigil. The *Bibb*, like a number of other seagoing Coast Guard cutters, periodically performs duty as an ocean station vessel at Ocean Station A or Ocean Station C. Station A is located in Denmark Strait, midway between Iceland and Greenland; Station C is about midway between Labrador and Ireland. Both locations are on main air routes.

The purpose of the ocean station vessel is to augment the safety of air travel. It has a radio beacon by which planes check their progress and mid-ocean

position. It tracks a plane by radar and supplies it with a double check on its speed and position. It keeps a record of passing planes for subsequent use should the plane develop engine trouble or ice up. It gives passing planes data on weather at different levels, so that they can fly at the most advantageous altitude. It supplies meteorological data to the weather forecasters on shore, which enables the routing of flights around, or clear of, areas where head winds or icing conditions would be encountered.

Should a plane have to land in the ocean, the ocean station vessel can coach the pilot on landing, give him a description of the wave systems and surface winds, and then, by high-speed circling and oil slicks, modify the sea surface for the landing. Survivors can be taken from the sea by the vessel itself when the waters are too rough for small boats or rafts to live. Even though a plane lands remote from a station, there is still hope that the fast-cruising vessels will find survivors.

2

CONSIDERING that the place was Station Charlie in mid-October, the *Bibb* was not having too bad a time of it. She had shrugged off three migratory storms during the preceding week. None of these had taken more than thirty-six hours to pass — not enough time to build up punishing seas. It started off like a pretty good patrol.

By the morning of October 14, a moderate to fresh gale had been blowing for fifty-six hours. Coming for twenty-four hours from the west, it built up a fast-running sea 100 feet long, then shifted to west-southwest and built up a cross sea about 200 feet long. These short, steep seas, converging at a 30-degree angle, set up the most dangerous possible conditions for a plane landing. Such was the general situation on the *Bibb* when the *Queen*, 310 miles to the west, turned back.

She called Gander — no answer. A passing freight plane intercepted the startling message, broadcast it, then went along with her. A passenger plane 300 miles to eastward put about, roared west, joined the *Queen* and the freighter, and homed them on the *Bibb's* beacon. Frantic radio traffic broke loose. From Halifax the alert went out to Coast Guard radio stations at New York and Boston; to air rescue bases at Harmon Field, Newfoundland; Goose Bay, Labrador; Mingan, Province of Quebec; and St. John's, Newfoundland; and to ocean weather stations and shipping.

At 6.47 A.M. the *Bibb* received a call from British Overseas Airways plane KCC: "Station Charlie from KCC. Aircraft call KFG going to make emergency landing at sea at Station Charlie at approximately 0800 (8 A.M.)." A message of this nature must be reported to the old man at once.

Because of a series of emergencies I had not, ex-

cept for a catnap or two, slept for seventy-two hours prior to climbing into my hammock at 5 A.M. Now, less than two hours later, my sleep was interrupted by a quartermaster shaking me. "Sir, an airplane is going to land near us."

"Say that again."

I must have appeared very unhappy and sounded grumpy, because there was amused pity in the quartermaster's voice when he repeated, "A plane is going to land near the ship but it won't be until 0800. Shall I call you at 0730?"

"Aye, aye; do that. Tell the OD to have the rescue gear broken out, and tell my steward to make some coffee."

I turned over with a sigh and then he was back. "Sir, it is 0730 and we have the plane on the radio-phone."

"All right! All right! Man the rescue stations."

"Valencia radio says there are sixty-nine persons on the plane."

I found myself standing in the cabin, numb with shock. Where, in the name of Peace, had a plane with sixty-nine passengers come from? Transatlantic planes carried twenty-one passengers — the big ones forty-two. But who ever heard of a plane moseying around in the middle of the Atlantic Ocean with sixty-nine persons in it? I could not understand it. I went on deck.

All the *Bibb's* crew not on watch were on the topside — more than a hundred of them. All eyes turned westward, searching. Scramble nets were over the sides. Boat crews stood by their craft. Swimmers in rubber suits with webbed fingers and toes were ready to go overboard.

And then the 42-ton plane hove in sight. How big she was! Two planes, small by comparison, were with her. As she circled again and again over the ship they hovered above her, circling with her as though they were trying to ease her forlorn descent.

The sun was out. The sea was sparkling and angry, closely streaked with the white lacework that is the mark of the fresh gale. As the steep waves raced and tumbled, the wind batted off their crests and blew them away as iridescent spume. Fascinating, terrible.

I gulped down a tumbler of water and still my mouth was full of the dust of horror. In my mind's eye I saw that flying eggshell collapse as it struck the sea; saw the great tail loop up and over as the plane smashed against the 30-foot waves; saw the wings wrenched off; heard the screams of the passengers within as the sea poured in upon them. "Oh, God, grant that I do not have to stand here helpless and see that plane open up and sink. Guide them down safely. Help me to save them." Most of us prayed in any way we knew. Someone near me was vomiting with nervousness.

I stepped from the bridge wing into the plotting room, called Pilot Martin on the phone, and gave

him the direction of the swells and the length of the waves. It would have been better if the seas had been longer, so that there would be room on their slopes for his big plane to land. There was no chance in these steep, confused seas to skim over the surface lightly; Martin would create a mess of twisted metal if he tried it.

I spoke up cheerfully, not feeling at all cheerful. "How about if the ship makes a few circles at the best speed possible? I believe it will knock down the sea a bit and you can land in the center of our circle."

Martin's voice was very soft, calm, and resigned as he said, "No, I think I'll just pick out a spot and set her down."

As Pilot Martin circled, surveying the three-story-high waves, he was heard to announce, "I am coming down now." Everyone held his breath and watched with horrified fascination as the *Queen* slanted toward the sea. Just as it was about to touch, it zoomed and banked into another circle. Young Martin was being careful.

For the watchers on the ship it was almost too much to bear. Not only was it seeing in your mind the crushed plane awash, but everyone knew that it was too rough for lifeboats. How, with the ship rolling 40 degrees, could you take the ship alongside the plane without beating it to death?

And then Martin was down! With his circle only half completed he saw what he wanted. There are spots where the different wave systems, being out of phase, oppose each other and create a comparatively smooth sea. Martin spied one. Leveling off fast, he closed his throttle, keyed off his ignition, and just beyond a high one, flying very slowly against the wind, he pulled into a full stall. As seen from the cutter, he plunked into a big wave just back of the crest. The plane and wave were dropping simultaneously and the shock was not heavy. The plane lost some of its momentum but sailed across the trough and appeared to be entirely engulfed by the next wave, which stopped the plane in its tracks, then passed on, leaving the *Queen* bobbing like a cork as succeeding crests and troughs swept by.

To the watchers she seemed to disappear completely in a great wash of white water; and then, miraculously, she reappeared like a huge whale and wallowed toward the rolling *Bibb* — a sort of splash landing.

Those on the *Bibb* felt relief and admiration for this incomparable landing. Then and there and for the remainder of their mortal existence, every person on that plane would owe his life to the nervy and skillful Charles Martin.

3

THE *Queen* thought it would be possible to tow on a line from the cutter while some method of transferring the passengers was being cooked up. The

port forward lifeboat crew climbed into their boat at the davit heads; a new 6-inch Manila hemp line was frescoed with kapok life jackets; the *Queen* started all four engines and began working her plunging way toward our lee side. It seemed like a good scheme when you said it fast, and it was working out well until, on the top of a Three Sister wave, the plane was seen to be caught in the back eddy of the cutter's lee and entirely out of control. Martin cut his engines but it was too late. Deprived of the braking effect of the wind, the plane sailed into the cutter's steel side. She took the impact squarely on the nose.

It was a sickening business and looked like the end; the cutter was rolling from 35 to 45 degrees. Rising on the next swell, the plane's number three engine struck the very top of a pulling-boat davit, 25 feet above the waterline, buckling the 4-inch screw member and driving the davit inboard. The boat crew had evacuated so quickly that no one remembered seeing them do it. The next roll of the ship found the starboard wing tips smashing the cutter's catwalk, this structure being aft, 10 feet above the weather deck, and the next found the port wing tip, a half ship's length further forward, crashing against the bow. The ship's engines, meanwhile, had been going full astern, with several repeat orders to the engineers for emphasis. After an eternity the screws bit into the water and the cutter parted company with her affectionate playmate.

Riding high and lightly on her belly, with a strong wind on her wing and control surfaces, the plane was still pretty much in her natural element. The plane crew were quick to recognize this. They manned their flight stations, kept the plane headed into the wind, worked the stabilizers to ease the pitching, and used as an agent of rescue the gale that sought to destroy them. Had the plane been allowed to broach to, the seas hammering the dipping wings with hundred-ton blows would, of a surety, have impressed the plane with a capsizing force or, more probably, wrenched off a wing, with a full measure of disaster following immediately. Martin's efforts to save his passengers did not end when the plane landed.

The cutter lowered a Monomoy ten-oared surfboat; it was wild work. In the boat were heaving lines to pass to the plane to be attached to injured persons so that they could be tossed overboard and hauled into the boat — a desperate expedient but the only one available under such conditions.

The cutter lay to windward making a lee and oil slick. This was not too effective because the cutter was drifting out of it at the rate of 3 knots and the plane was blowing downwind at 5 knots. (The plane drifted about a hundred miles during the 24-hour rescue operation.)

There were no injured to be removed, and the small boat reconnoitered about the plane for more than an hour. The boat crew saw the passengers

peering through the windows and heard the ominous creaking of the sponsons. The boat dared not approach the plane from any quarter — both craft were alternately riding the crest and dropping dizzily into the trough. On the lee side, the boat was in danger of the plane's blowing down upon it; on the weather side, there was danger that a curling sea would surfboard it under the *Queen's* hull.

The wings were, for the boat, potential flails. The seas were washing over the sponsons and high up on the hull. The boat was hard put to keep up with the fast-drifting plane. There were a number of escape hatches as well as the passenger loading doors, but these were all too near the submerged sponsons or flailing wings. The only feasible exit was the door at the port side of the pilot's compartment on the upper deck. This was alternately just above the tops of the waves or 40 feet from the troughs as they passed under and aft.

Because the seas were steep and short, the plane plunged violently many times each minute. It reminded me of a giant swing at Coney Island. I was horrified and felt sick as I realized the suffering and danger of those in the plane, tossed about like dice in a cup.

After an hour the order was passed by walkie-talkie for the boat to stand by to be picked up. The crew were by now exhausted. The boat did not pull back to the ship against wind and sea; instead it lay to and the cutter drifted down upon it.

Hoisting a boat by a vessel rolling over 40 degrees offers some difficulty. The boat alongside is alternately even with the rail and the turn of the bilge. Here boat drill pays off. An untrained man cannot be one with the boat but finds himself in the air like an inexperienced equestrian as the boat follows the sea.

The boat was finally hooked on. The falls were powered by all of the ship's company. It was faster that way than with an electric winch. With the boat on a crest all hands "ran away with it," and with only a few hard slams against the ship's side the boat was quickly hoisted to the davit heads.

A sea rose up, slapped the boat, unhooked the forward fall, and spilled the crew out of the boat, which hung straight up and down, with the forward end dipping in each wave. But the crew was well drilled; each man had a grip on the dangling life lines and now scrambled on board.

The coxswain, Lieutenant Hall, who had been in the stern sheets, descended into the sea-washed fore sheets, and hooked on again. When I ordered him on board, before attempting to hoist the boat again, he gave me a hurt look.

4

JUST after the collision between the plane and the cutter, Martin, probably alarmed by the damage to the plane, said perhaps he had better abandon ship

in his "ten-person" life rafts, but he was told to hang on unless the plane opened up. The capacity of the life rafts was based on three persons in each raft and seven in the water hanging on to grab lines. The sea temperature was 50 degrees. A request was radioed to the U.S. Weather Bureau at Washington for a special forecast for the next twenty-four hours. While we awaited the reply, there was not much that could be done except to make oil slicks and shelter the plane from the worst of the sea. The forecast came. It promised a cold front and a new gale from the northwest for the next day. That could mean that the current gale would move away with a short lull before the next one struck.

Pilot Martin was told about the weather prospects and to sit tight. When he thought the time had come to abandon ship, his people could take to their rafts or jump into the sea, and the cutter would try to fish them out. Over the radiophone he could be heard retching but he seemed poised and calm. It was asking a good deal to tell them to stand such a beating indefinitely, waiting for the storm's abatement that might not come or else would come too late. Yet it was a certainty that hasty action would save some but hardly all.

We suggested to the plane that it should launch a rubber raft on a line and see what happened to it. This was done and the cutter did likewise with a similar raft. The small rafts flew like kites or spun about crazily in the wind.

The cutter launched one of its recently acquired fifteen-person abandon-ship type rubber rafts, which did a little better; but even when it stayed right side up on the water, the motion was so violent that it was evident that its use would be a desperate measure.

The cutter made various practice approaches on the plane. It was absolutely necessary to learn certain things about relative motion and drift of plane and cutter if the rescue was to be successful. Maneuvering 2 or 3 miles downwind of the plane, the cutter created oil slicks in the line of the plane's drift, and notes were made of the effect. Being much of the time beam to the seas, the cutter of course rolled deeply and quickly. One of the finer points to learn was just how close it could drift broadside to, and ahead of the plane to shelter it, without suction eddies destroying the plane's control. It was very important that the plane not be allowed to broach to while passengers were leaving it. One slap of a 115-foot wing would destroy anything in its way.

The plan of rescue was to get all lifeboats over if possible and, as the people abandoned the sinking plane, drift the ship down on them and cast among them rubber rafts, life preservers, lines. Swimmers in rubber suits would aid the boats in saving as many as could be reached. We hardly expected to save all. However, when Martin made his incomparable landing and the flying boat miraculously

held together, a faint pulse of hope began to be felt that perhaps all preconceived methods could be supplanted by something — just what, was not altogether clear — that would assure a greater measure of success. As the flying boat drifted downwind into the oil slicks and the cutter shielded her from the wind, we could see that a marked abatement of the sea took place. Martin had kept his radio quiet to save the batteries and gave no indication of conditions in the plane. It was not necessary that he should, for anyone could see that the plane was taking severe punishment and that operations might have to begin at any moment.

Sunset was due at 5.32 P.M. At 3.30 Charles Martin phoned the *Bibb*. They had had enough! He reported that the plane was taking water, the tail section was coming loose, and it did not seem that the sponsons would last much longer. The racked plane was not exactly breaking up but it was much the worse for wear, and so were the people in it. His final plea was: —

"Skipper, will you try to get us off from here, some way, before dark?" The chips were down.

5

I INSTRUCTED Martin to obtain volunteers from among the strongest men and get them somehow into a raft. (If the test failed, these would have a better chance of surviving in the cold water until the cutter could drift down on them and pick them up.) If the raft behaved well it was to be cast adrift; otherwise the men were to be hauled back on board. The cutter would circle the plane twice. As it hove to ahead of the plane after completion of the second circle, the raft was to be launched and manned.

At first the operation did not turn out so well. The cutter was not close enough on the second circle and had to try again. Then the raft did not seem sufficiently inflated, and when a second flask of compressed CO₂ gas was fed to it by Martin it burst. He inflated a second raft. The cutter, at 15 knots, rolling her rails under, spread an oil slick 3 miles wide downwind and then came in close across the plane's bow and backed her engines full speed. At 3.40 P.M. the raft was launched, and rode like a chip on the ocean with three of the merchant seamen who were among the plane's passengers crowded into it. Hearts leaped on the *Bibb* as one of them waved gaily to the plane. The raft's men used their paddles. It was a futile gesture. The cutter drifted down upon it. The bull horn blared admonitions not to stand or reach out until each man received a bowline from the cutter and passed it around his body. At 3.57 P.M. they were hauled on board. While adrift they doubted they would make it, and no one blamed them.

Our hopes mounted as the tiny raft successfully completed its voyage, but it had demonstrated the

impracticability of effecting the rescue by means of the small rafts. Pilot Martin advised that it had been touch and go with the little raft; a large one from the ship would do better. We decided to use the fifteen-person rubber rafts.

With darkness approaching, the action became fast and furious. In no time at all, one large rubber raft was leaking to the point where it was useless; a second had been inflated with air from the ship's air lines and launched, only to be tossed by the sea into the ship's starboard propeller, where the painter was spooled snugly around the propeller shaft; and the third and last was bobbing alongside, trying to beat itself to pieces.

It was clear that towing these rafts on shuttle trips between cutter and plane was going to be something of a chore. A huddle on the bridge produced the plan of launching the heavy self-bailing surfboat, towing the raft to the plane, and holding it there on a line as a loading platform.

The Coast Guard 26-foot self-bailing motor surfboat is the finest all-round rescue craft in existence. Girdled with flotation tanks and filled beneath the entire deck with air cells and buoyant material, it sheds water like a duck. The only thing is, it was designed primarily for use at surf stations, where it is put into the water from a special launchway.

Launching the 5800-pound boat from a rolling ship is another matter. In less than a minute the ship had swung the boat afoul of the cradle and torn off the rudder shoe. It was a race against darkness to repair the damage, with the heavy boat trying to brain the artificers. Finally the boat was launched and away from the ship, towing the big rubber raft downwind, the seas threatening to toss the rubber rig on board the surfboat.

It was not easy going. The light towline broke repeatedly, resulting in a chase each time, and a heavier line could not be used for fear of tearing the thin walls of duck and rubber. Finally the motor surfboat crew took the rubber raft alongside and made better progress, although the pneumatic craft still bucked like a bad horse at a rodeo. Meanwhile we salvaged the second raft. The sun was coming closer by the minute to the rim of the sea.

Martin, informed of the plan, inflated another small raft and, dropping it overside, payed out the painter. When, in response to a signal, he hauled the painter in, he found that his miniature raft had been cut adrift and replaced by a good-sized raft with a supply of the small cordage he lacked.

At 5.30 P.M., two minutes before sunset, the raft began receiving passengers from the plane.

On the plane, the precedence decided upon for leaving the ship was unusual but acceptable. The tradition of "Women and children first" was put aside in favor of "Families will not be separated."

The first family to leave consisted of an eighteen-month-old baby girl held in her father's arms, a

five-year-old boy clinging to his mother, and a nine-year-old boy who was put in the care of another woman. The raft was hauled as close to the bow of the plane as could be done without getting it caught underneath. First, a man made the leap successfully, landing in a heap. His assignment was to seize the women and children following and keep them from being washed away. Then the father made the jump, holding the baby. She never did get really wet. She turned her head from side to side throughout the boat operations as though she feared to miss some interesting detail of this grown-up horseplay. I am sure the mother, holding her five-year-old son, will never know whether she jumped or was tossed into the raft; her only concern was for her children. As the raft rose on a crest to within a few feet of the hatch, the nine-year-old boy was urged to jump; he balked.

The exit hatch was located in the extreme bow on the upper deck. The plane in calm water was 20 feet high; when a trough of the sea passed, the raft would be 30 to 40 feet below the hatch. Sometime during this downward plunge the boy jumped. He landed in the sea. As he was hauled aboard the raft he complained, "I am ruining my good suit." Other passengers landed squarely in the raft.

The line holding the rubber raft to the plane was slacked off and the ticklish business of the transfer to the motor surfboat followed. Because the raft was not staunch enough to be towed on shuttle trips between plane and cutter, and the surfboat could not lay alongside the plane for fear of puncturing it and for fear there would be broken limbs among those jumping into the boat, the plan of operation used was the only one that could have been successful. The same sequence was followed during each boat operation. The cutter made an oil slick in the area downwind of the plane for several miles and then lay close to it sheltering it from the wind and sea; the passengers debarked into the rubber raft landing platform; the surfboat crew pulled the passengers from the raft, took them alongside the cutter's landing nets. They were hauled on board by lines secured under their arms.

6

ON BOARD the cutter, as the surfboat approached in the semidarkness, twenty minutes after sunset, excitement was at a high pitch. The lurching of the ship, the cold wind and spray, the shrieking of the gale, went unnoticed. The most dangerous part of the thing had gone well. We felt confident that as soon as the ship drifted down on the boat we would snatch its people from the sea even though the boat capsized.

The boat crew cautiously worked their craft parallel to the ship, abreast of the landing nets. The ship drifted down on them. And then came the big emotional jolt that clutched at our throats, filled our

eyes with tears and our hearts with prayers. Somewhere, in the excitement and the preoccupation with plans for rescue, the human element had been lost in objectivity. Women and children in the boat caught us unprepared.

There was the boat crashing against the side as the wind pressed the ship down upon it, tossing wildly up to the rail into the lights, down out of sight into the darkness, washed by the sea, flayed by the wind and spray — and in the midst of it all a baby held aloft. Eager hands reached out for it. A woman in the boat, hysterically resisting attempts to place a line about her, screamed, "Save my baby! Save my baby!" Then, as the baby was snatched up by those on the nets and passed on board, "Thank God, my baby is saved!" over and over.

So anxious was everyone to get the baby quickly on board that men got in each other's way. A burly man with a hoarse voice shouted, "Let go, you stupid bastard! Are you trying to drown that baby?" What was funny was that he was sobbing.

Now the women were calm and hauled on board, weak, limp, almost a dead weight, and as they were placed on their feet and felt the deck, sensed their safety, they collapsed and were carried to the sick bay. A pair of bearers picked up one of the women and attempted to carry her aft, only to fetch up short on the line still fastened to her.

The boat, the nets, the deck, had been a nightmare of shouting, tussling, weeping, and cursing crewmen. Curses of excitement on their lips, but prayers in their hearts.

On the bridge, directly above the scene, I found myself choked up, unable to speak. Everyone on the bridge was gulping for speech and blinking through a smarting film of tears.

Laughter followed. The ship's doctor was mincing aft toward the sick bay holding the baby high in both hands. As the ship lurched into a 45-degree roll, he would balance himself like a ballet dancer on the slippery deck. Any experienced seaman would have had the baby tucked under one arm like a football, his free hand sliding along the grab rail. Scampering around him, expecting him to slip and fall, were several sailors, ready to catch him and the baby.

Now we had something to report to an anxious world. Our dispatch read: "Darkness approaching. Plane leaking. Passengers mostly prostrated by seasickness. Winds of gale force. Rough sea. Three persons removed unharmed with small life raft. Continuing operation with boat and rafts. Second successful boat and raft operation brings total saved thus far to five men, two women, two little boys, one baby. Baby appears to have stood ordeal better than the rest."

At 6.10 P.M., a group of ten were hauled up the nets, and at 6.34 eleven more. The action was going great guns. During this third trip the gale reached its extreme height. Always, just before a

North Atlantic storm begins to abate, there is a sort of dying flutter of squalls and mad seas. As the boat departed for the third trip, the quartermaster reported the wind at 45 knots. As we watched the plane careening dizzily in the beam of the searchlight and the boat threatening to capsize as the waves broke through the oil slick into breakers, disaster seemed to be at hand. We could only speed up the Diesel-oil pump and let the wind whip the oil toward the plane.

The passengers jumped or were pushed out of the plane into the raft and were hauled into the boat. One man had his scalp laid open when the raft slammed against the plane. They all were to find themselves black and blue with bruises, but they made it.

What was happening to the raft while it was being battered by the seas was not good. The motor surfboat was not doing so well either. As it lay alongside, the wind was shrieking like ten thousand devils, and the seas curled around the stern of the ship and raced along the lee side. The boat was repeatedly submerged. The impact of the boat slamming into the side of the ship was sickening.

We could not afford to let the surfboat run out of gas and drift away in the darkness, so it was brought alongside to be refueled. The crew had to pour fuel into the tanks and keep the boat fended off at the same time. The boat kept surging aft with the seas, and each surge would end in an abrupt jerk as the slack in the lines took up. This was varied by severe slams against the ship. The crew of five went sprawling in either event. They spent about as much time in the bottom of the boat as they did on their feet. There is a limit to what even a Coast Guard surfboat can stand. It began to show signs of premature old age.

Except for the cockpit, a self-bailing surfboat is completely decked over and divided into air tanks. A low bulwark completely around the boat gives a cargo space on the deck. It is into this space that the seas break; they never get into the sealed-off hull at all. The water runs out through freeing ports, the self-bailing feature. Even if the boat capsizes, the crew can stand on the keel, lean back on the righting lines, and bring the boat right side up again. This is often done at lifeboat stations on Sunday afternoons to regale the visitors.

The boat rode too deep in the water as it set out for the plane. We could tell that the air tanks were filling up. And there was a sort of wobbly quality to the boat's motion. Lieutenant Hall, the coxswain, said afterward that the boat felt "limp." I judged that this would be the last trip for this particular boat. In the meantime the plane had drifted too far away for comfort — my comfort — and the raft had broken away from the plane.

It is one thing to see a raft from the bridge of a cutter with the searchlight rays reflecting from the wet, black rubber, but it is something else

again to find a raft when you are in the trough of the sea in a small boat. The raft was what my Louisiana steward termed "a double shade of black." It remained mostly out of sight behind the crests, playing hide-and-seek with the boat. When Hall finally did find it, it was already deflating. Of the three separate compartments in the main body of the raft, two were leaking. A separately inflated tubular gunwale had completely collapsed.

This time there were sixteen passengers in the raft — too many. Their legs and arms were so entangled that no one could be swept away by the sea. It was all-for-one and one-for-all; sink or swim together. They were all yanked into the surfboat; but what with the overload and the leaky tanks, the surfboat didn't display much zing either. It too began to sink. However, now that the boat was there, the passengers became quite hopeful and Hall had no trouble persuading three of them to go back into the rubber outfit with three of the boat crew.

The thing to do was to secure the raft to the boat with a line, but the line was inextricably tangled up with the passengers, so the raft was held alongside by hand. The signal light was sought in order to call the ship for help. It could not be found. There was so much tangled-up humanity that nothing could be found.

I guess what happened next was that the propeller fouled some of the stray lines of the raft. The gear case flew to pieces, the engine housing was smashed by a sea, and the tail shaft and propeller disappeared. The boat broached broadside to the sea and was completely overwhelmed. Wave after wave washed over it. Boat and raft were kept right side up by delicate balancing by the crew.

With the searchlights playing on the scene, I could see through binoculars people exchanging places between raft and boat. Both craft seemed too deep in the water. If they were in trouble they should have signaled with their light. As usual, I was irritated by the hampered feeling I get from wet binoculars. I passed them to Webb, the ship's engineering officer. He was always there when I needed him.

"He isn't showing much freeboard, Captain. Looks as if he's got his tanks about flooded."

I called out to three others to use binoculars and give me their interpretations. I had to be sure. If I should drift down on them before they had completed their transfer, someone might get hurt. On the other hand, if the boat had lost too much buoyancy . . .

I eased the ship nearer and called them on the bull horn. "Are you all right? Acknowledge with your light." There was no answering flash. They shouted something no one could understand. I worked the ship upwind and drifted down on them, aiming to bring the net just abaft the bridge to bear. It was a lucky pin-point landing!

And then the boat and raft were alongside the

net. It was apparent that we were just in time. A ship rolling 45 degrees, a slashing sea alongside, a swamped, sinking boat and a submerged raft battering each other, passing each other, and alternately one on top of the other. Twenty-one half-drowned people mixed up in it. The whole works tossed up almost to the ship's deck by one wave, then dropped down far out of reach again by the next. A swarm of rescuers on the nets reaching out, lines snaking down into the boats from the deck above. The deck and life lines jammed with those seeking to help.

The boat crew and the passengers were by turns in the boat, in the raft, and in the sea. The crew tried to get lines around the passengers and I was shouting through a megaphone for the boat crew to tie lines around themselves as well as the passengers. I do not believe anyone listened to me. Everyone was shouting to someone near-by or else totally absorbed in the action of the instant, which was mostly grabbing someone out of the water or tying a line around a fellow floater.

Scores of rescuers dropped over the side on lines all the way aft to the gangway. Some went into the water, others dangled halfway down the ship's side. It was like a vertical bucket brigade.

My vantage point was the wing of the bridge. From there I could see the entire deck. I had at hand megaphones and a talker for the public-address system. The radio voice phone to the plane was but a step away. The searchlight operators were within hearing. The engine-room telegraphs were at hand. I could make brief sallies along the superstructure when occasion demanded. In general the p.-a. system gun stations or bull horn gave complete control over the personnel manning the boat lines, the oil spray, and the rest.

The raft somehow got in between the surfboat and the ship, and the submerged surfboat was being washed aft. There was a lightning glimpse in which I saw two persons washed out of the raft and whisked aft into the darkness. Someone leaned far over from the bow of the surfboat. One hand held the gunwale, the other darted down into the sea. A collar with a head sticking out appeared grasped by the outstretched hand and I heard a triumphant and gleeful "Got him!"

The people who washed out of the boats, whom I saw swept away into the darkness, seemed to me to be goners. I think the factor that saved them was the experience gained by the men from the preceding operations. They had caught the knack of life-line teamwork after the swimmers, in their heavy waterproof suits, had proved too slow for the tempo of the operation.

What we came to was to bend a line around a man's chest and send him over the side with a line to tie around a passenger. Both lines were tended on deck by a group. With a soggy, dead-weight passenger hung up along the way, other men would descend to assist. After that first experience with a

boat alongside we lost no time in amending our plans and augmenting our gear. On every hand we provided 40-foot lines with loops rove in one end. The decks and ladders were sprinkled thoroughly with sand, and every hand that could be brought to bear stood ready at the lee rail.

Teams formed further aft on the ship, and somewhere along the line the drifters were latched on to. I could not see these retrievings from the bridge because it was dark back there in the water. It was pretty rugged for those men dangling from lines, being dunked in the cold sea as the ship rolled and the waves came up; but they were so excited that not a one I questioned had noticed the cold.

Twenty-one persons in the sea, about a hundred of the *Bibb's* crew hanging over the side and manning the rail. In less time than it takes to tell it, they were all out of the sea and safe on board. Mike Hall was the last up. He tottered up to me, saluted, and said, "Sir, permission to take another boat over and get the rest of them?"

My reply was, "I think you've had enough. Anyhow, go below and get some dry clothes on. First go to the sick bay and get a snort."

7

THE loss of the motor surfboat dimmed the prospects of completing the rescue. Even that boat had been having a rough time of it getting the big rubber raft to the plane. It was certain that a pulling boat could not tow the raft fast enough to catch the plane, and it wasn't going to be any picnic putting a pulling boat in the water. There was one way it might be done. If the pulling boat and raft were to be dropped downwind of the plane in line with the plane's drift, it might be possible to duck aside as the plane blew down, close in quick, and pass the raft's painter to the plane. It would take some able boat work though. To begin with, the plane was now moving at 4 to 5 knots, and if the boat misjudged the plane's direction or speed there would be no more boat.

I sent for Ensign Macdonald. He had manned the steering oar at drill many times and in rough water, too, but he had never taken a ten-oared boat out at night with the thwarters reduced to six to make room for survivors. And then there was the raft to cope with.

"Mr. Macdonald, do you think that you can take six volunteers in a Monomoy and pass the raft painter to the plane with a shoulder gun, if we put you near the plane?"

Macdonald had seen what had happened to the strong motor surfboat; he was shivering with excitement. "I'll do my best, sir!"

I was in the plotting room talking on the radio-telephone to Pilot Martin when Macdonald called over the public-address system for volunteers. "Now hear this," Macdonald said. "Anyone desiring

to volunteer to man number one boat lay up to the starboard wing of the bridge."

Immediately there was the sound of feet from all directions, and the bridge ladders clanked and rattled as men raced for the bridge. I was reminded of scampering mice. I cannot say what number volunteered, but it seemed to be about everybody.

The first to arrive insisted on their precedence. Those who had not already manned a boat that day advanced that fact as a priority for selection. Their arguments must have prevailed, for among the six men chosen there was not a seaman rating.

They were out there from 9.39 until 10.45 P.M. in the darkness, in a gale, with only six oars. Sometimes we caught them with the searchlight on a crest, but mostly we could not see them at all. A whitecap and a white boat are hard to tell apart at half a mile; and being downwind spreading oil, that was as near as we dared to get.

They passed the raft to the plane — a wonderful bit of boat work. I would not have given a plugged nickel for their chances. I just hoped.

They shot several lines over the plane and finally felt one going out in jerks. They secured the running line to it, and the raft painter to the running line. Then they waited an hour for the raft to appear with people in it, and nothing happened. After such a long wait, with no sign of the raft, they conceded failure and gave it to me on the handy talkie radio.

We got them back on board with their boat. They were used up. But the plane did have the raft.

I called the officers about me. "How do you chaps feel about it? Shall we take a chance on the plane's staying afloat until daylight? If it does we can most likely get every last one of them off. Or should we save all we can now?"

Various conjectures were voiced, but the expression that seemed to ring a bell of conviction to all present was: "We have used up all our luck tonight. We came awful close to disaster that last trip and it will be harder with a pulling boat. Let's not push our luck too far."

If the plane should show sudden signs of sinking, the twenty-two people on board could go for the raft. It was rated as a 15-man boat or a 25-man raft. A dozen or so would be in the water hanging on to the grab lines, or maybe all of them would be in the water, but I was confident I could drift the ship down on them within a few minutes. Anyhow, Pilot Martin would have to make the decision.

The radio was dead and we had not had good results with blinker, so I took the ship close to him, making 15 knots to maintain control. "Do you think the plane will stay afloat for another seven hours?"

No answer; no acknowledgment. Too much wind and sea noise, maybe; or perhaps they were too tired and resigned to make the effort to hear. So we circled again and came by within 50 feet.

"How do you feel about spending the night on the plane?" It seems an absurd question to have asked, but the plane's landing lights flashed a dot followed by a dash, meaning "Affirmative." Then complete darkness again; not a light anywhere on the plane. So we settled down to watch our charge for seven anxious hours. It was no fun for us, and it was hell-on-water for them.

At 11.30 we advised our boss, Commander Eastern Area, "Operations suspended until daylight."

With the plane spotted in the searchlight, I toured the ship. All hands had been broken out at 7 A.M. and had been strenuously engaged since. In the past forty hours the first watch (4 to 8) had about six hours sleep. The midwatch (12 to 4) had two hours sleep, and the morning watch (4 to 8) had started fresh at 4.30 A.M. without regard for regular watches. Half the crew (those with even billet numbers) were told they could hit the sack until called for. The other half remained on deck or assisted the dayworkers with the survivors and tended the engineering plant.

There was not much sleeping going on. The lads in the boat crews were too tired to sleep and the others too excited.

The survivors not in the sick bay were nicely aglow. The sugar water and whiskey poured into stomachs, which had been without food to speak of for more than a day and had been racked by the "dry heaves" for several hours, had a skyrocketing effect. They were high for a while and then came relaxation and — I was going to say sleep, but it was more a state of coma, interrupted by nightmares and seasickness.

The sick bay was a shambles. Water sloshed across the deck. Wet clothing, including fur coats and once smart millinery, was everywhere. The bunks were occupied by the worst of the shock cases.

At 6.45 A.M., the time of sunrise, the wind was no more than a fresh breeze. The barometer was up and the sea was down. As usual after a gale, a treacherous swell was running; but compared with the night before, conditions were mild. The captain's gig was selected to transfer the remaining passengers, and was lowered at 7.03 A.M. Twenty-three minutes later the gig was back with eight survivors. Six minutes sufficed to get them on board.

The gig shoved off again and approached the raft tied to the plane, then had engine trouble and drifted away. Three minutes later a pulling boat was in the water and headed for the plane. The broken-down gig went unheeded as far as I was concerned, except for some vitriolic remarks, until the plane and raft were empty of human life.

Ensign Macdonald took six survivors into the boat. They helped row. Only four oars had been

manned in this ten-oared boat, to make room for the survivors. Again the pulling boat unloaded the raft.

The gig got its motor running and made for the raft. I angrily roared orders over the bull horn for it to keep clear. We were doing all right with the pulling boat and I was not going to change a winning game. One more successful trip and total success would be ours — something I had not dared to hope for. I was taut as an E string, fearing some last-minute mishap.

I saw the raft cut adrift from the plane by the boat crew and knew this was the last load. I stood by the landing net tensely concentrating on every detail of preparations for unloading the boat. Those who attempted to talk to me were harshly repulsed; no distraction could be tolerated at this point.

And then, the pulling boat was alongside with six survivors, and the noble raft was adrift on the sea, its work finished. At 8.33 A.M. the last passenger climbed over the rail and *We have done it!* Yes sir, we got them. But what is this?

The gig came up and Mike Hall shouted something to young Macdonald. The pulling boat shoved away. The gig stopped alongside the net, the crew looking sheepish. Just before the gig's motor failed, two survivors had hopped into it from the raft and now they clambered on board.

We had saved the sixty-nine passengers and crew of the wrecked plane — every last one of them.

As for Pilot Martin, his was the triumph. Triumph over the sea and the air. Triumph over himself. His nerve in turning back, his incomparable landing, and his fortitude in keeping his plane under control after landing, had made this rescue possible.

We could not start for port just yet; not with the big seaplane wallowing on the surface, clinging stubbornly to life. Word came that the operators agreed to destroying it, and I hastened to do so before they changed their minds. I did not care to risk lives in a hopeless salvage attempt. Martin related how an identical plane had landed undamaged in the Pacific and been towed across a sea of mirror smoothness for three days, after which the plane was so racked and weakened it had to be abandoned.

With prow crushed and wings askew the *Queen* might sink so suddenly that a salvage crew would be trapped. So we lost no time in pouring explosive and tracer bullets into her. There was not enough gas left to make a belch of flame, but the lub-oil tanks by each of the four engines burned fiercely, and by and by some gas was touched off. The giant tail dropped off, the wings drooped, and the *Bermuda Sky Queen* gave up the ghost. She was a staunch old girl, though. She kept alive until all her people were saved. Then, down she went in a blaze of glory.

This is the third autobiographical narrative to win an I PERSONALLY AWARD of \$1000. The editors will continue their quest for such material veritable in detail. Manuscripts not exceeding 10,000 words may be submitted up to December 29, 1950.



An Atlantic Story



WILLIAM L. COPITHORNE taught English in a Havana preparatory school after his graduation from Harvard, and more recently at the University of Havana. He spent most of the war in Newfoundland in cryptographic work for the United States Army, and he is now on the faculty of Kenyon College, where he teaches Creative Writing. His "Morning Musicale" appeared in the *Accent on Living* pages of the April, 1946, *Atlantic*.

TO WET A WIDOW'S EYE

by WILLIAM L. COPITHORNE

WHILE living in Cuba several years ago, teaching a course in the history of English poetry at the summer session of the University of Havana, I was puzzled for a time by receiving through the mail each day an unsigned Spanish translation of an English poem. The taste of the translator was catholic, his subjects ranging from Shakespeare's *Tired with All These, for Restful Death I Cry*, to Felicia Hemans's *The Child's First Grief*. I at first assumed that one of the students in the class was thus shyly manifesting his interest in poetry, or perhaps using Shakespeare to tell me that he found the course unbearably dull, but one of my Cuban friends, to whom I showed the poems, dismissed these theories with a peremptory wave of his hand. "It is a simple matter," he said. "One of the girls in your class has fallen in love with you, and has chosen this method of expressing her feelings."

I scoffed at such a possibility, and pointed out that the choice of poems — they were all expressive of the misery of life — was hardly what a girl in love would make for such a purpose. My friend shrugged. "To the Cuban woman," he said, "poetry is indistinguishable from the emotion of love. The pessimistic tone of the poems doubtless expresses her suffering for a love that she feels is hopeless." He smiled happily and patted me on the shoulder. "Congratulations, *Amigo*," he said. "It is always a pleasure to be loved."

Each day thereafter I eyed the students speculatively to see if some trace of self-consciousness would expose the translator. The class, which met each afternoon from Monday through Friday, was made up of about fifty men and women, all Cuban

teachers of English, varying in age from twenty to sixty. With understandable apathy, for the summer was hot, they were complying with a Cuban law which required all public-school English teachers to attend the summer session of the University; and while, to my apprehensive eye, each of them looked capable of sending poetry anonymously through the mail, none appeared equal to the effort of translating an extracurricular poem a day. The poems kept coming, however, neatly transcribed in longhand. Sir John Davies's poem, which ends,

I know my life's a pain, and but a span;
I know my sense is mock'd in ev'ry thing:
And to conclude, I know myself a man,
Which is a proud, and yet a wretched thing,

narrowed the field, I trusted, to the men in the class, and Edgar Guest's *Lord, Make a Man Out of Me* momentarily confirmed this impression. Emily Dickinson's bleak little lyric, *A Wife at Daybreak I Shall Be*, threw me off the track again, and I got nowhere until a poem by one Mrs. David Porter, called *Thou Hast Wounded the Spirit That Loved Thee*, unnerved me to the point of giving the students an examination, in order to compare the handwriting on their papers with that of the poems I had been receiving.

This device proved successful, and I was somewhat relieved to find my friend's theory refuted. Señor Guillermo Contreras, a middle-aged man with mournful brown eyes and a drooping mustache, who sat quietly and attentively each day in the front row, was unmistakably the translator. When I detained him after the next meeting of the class, he anticipated my question.

"You wish to know if I am the translator of the poems you have been receiving?" he asked sadly. I nodded and he heaved a deep sigh. "I must confess that I am," he went on. "You see, Señor, I am very timid as a man, and even more timid as a translator of poetry, so I beg you to forgive me." He tugged at his mustache and looked at me hopefully. "I sent my translations to you in the hope of obtaining your criticisms of them eventually. You liked them — no?"

I told him that I thought they were very good, and he nodded in sober agreement. "It is my hobby," he said, "and you must understand why it is so important to me. All day long during the school year I sit in the classroom, listening to my students translate from their grammar books. 'The pencil is red — *el lápiz es rojo*.' 'The table is green — *la mesa es verde*.' 'I drink the coffee, you drink the coffee, he, she, it drinks the coffee.' And at night, when I go home, those sentences repeat themselves in my mind. 'Where is the ink? The ink is on the table.' 'Do you like lemonade? No, I do not like lemonade.'" Señor Contreras breathed heavily, and his voice rose. "You understand, Señor, that I must find refuge from these sentences. To expel them from my mind I read and I translate your Shakespeare, your Milton, your Henry Wadsworth Longfellow." Trembling a little, he stopped and looked at me apologetically. "Forgive me, Señor," he said, "but, as you see, poetry means very much to me. In the future, you may rest assured, I shall present my translations to you personally. I shall be grateful for your criticisms."

I saw Señor Contreras frequently after that, for we lived in the same neighborhood, and we would often get the same bus to and from the University. His sources for translation, he informed me, were *The Oxford Book of English Verse* and a volume entitled *The Best Loved Poems of the American People*, into both of which he dipped impartially. Of the two, he confessed that he found the American anthology more useful, in that the poems were grouped by subject matter under such headings as "Love and Friendship," "Home and Mother," "Animals," and "Memory and Grief," thus making it easier for him to pick a poem suiting his mood.

He no longer sent me his poems through the mail, but I shortly had cause to repent my curiosity, and to wish that I had left things as they were, for he now chose to read the translations aloud to me in circumstances that I often found both inconvenient and embarrassing. As we would stand on the street corner, waiting for a bus after class, for example, he would draw a translation from his pocket and in a deep, resonant voice, and with appropriate gestures, would read it. His timidity, both as man and translator, had apparently vanished completely, for other people who were waiting for the bus would invariably cluster round and

listen, and when he had finished he would bow gravely to them, obviously pleased by their murmurs of "*Qué bonital Qué bellisimal*." Frequently two or three buses would pass us while we stood on the corner, for, no matter in what hurry I was, I could never bring myself to interrupt him in the midst of a long poem such as *Lycidas*, which would take him ten or fifteen minutes to read. If we got on the bus before he had read me his translation of the day, he would start it there, drawing the attention of the driver and the entire body of passengers, all of whom would listen appreciatively. One day our bus driver, intent on Señor Contreras's translation of Keats's *Ode to a Nightingale*, sped through a red light and was stopped by a policeman, who, when the cause was explained to him, detained the bus only for the length of time it took Señor Contreras to finish reading the *Ode*. "A very beautiful poem," the policeman said, waving us on.

2

ON ONE particularly hot Friday afternoon, I let the class out early, and went with Señor Contreras — or Guillermo, as he had by now asked me to call him — to a near-by café. Over a *café solo*, he read me his translation for that day, Matthew Arnold's *Dover Beach*. When he had finished I ventured to ask him why he chose subjects so consistently melancholy in tone. He carefully replaced *Dover Beach* in his pocket and sighed. "As you have observed, Señor," he said, "I am not only a timid man, but also a very melancholy man. I feel that I know you well enough to confide in you the cause of my melancholy." He frowned, and spoke with an effort. "I suffer, in brief, from a love that I have not the courage to declare."

He sipped his coffee meditatively before he continued.

"The object of my love is known to you. She is a student in your class in poetry — the Señora Migdalia Perez, a widow, next to whom I sit in the front row."

I recalled Señora Perez as a short, stout, attractive woman, much given to the manipulation of a small black fan, and far less attentive to what I had to say about poetry than Señor Contreras was. Indeed, she had often annoyed me during class by distracting the men around her by her dexterous use of the fan. Guillermo, I gathered, had been more aware of her than he had appeared to be.

"My timidity," he went on, "forbids me from making overtures, so I draw comfort from translating sad poems."

"But you have no problem at all, Guillermo," I said lightly. "Why not send her some of your translations?"

"Ah, no," he said. "I fear it would be indelicate."

"Not at all," I replied, and I reminded him of Petrarch and Laura, and of Dante and Beatrice. "And even in England," I added cheerfully, "you have the example of the Brownings."

"Very true," he said, brightening a little. "They would not be poems of my own composition, of course, but it may be just as well. A translation will not seem so bold, perhaps." He thought hard for a minute, and then turned to me resolutely. "I shall do it," he said, "and I shall let you choose the first poem for me to send her."

I opened the anthology which we used in class, and came upon Shakespeare's *Shall I Compare Thee to a Summer's Day?* "Here," I said. "Here's an excellent one."

"Shall I compare thee, Señora Perez, *a un día de verano?*" mused Guillermo. "A very beautiful poem. You are convinced that it would not be indelicate?"

"Not at all," I said. "Just be sure to sign your name."

Since the class did not meet again until the following Monday afternoon, I had the week-end, before seeing Guillermo again, to ponder my impulsive advice. On Monday morning I was startled to get a poem through the mail, this time not in Guillermo's handwriting. The paper was heavily perfumed, and the poem, *Drink to Me Only with Thine Eyes*, in the original English, was signed with the initials "M.P."

It took me a minute or two to suspect what had happened, and my suspicions were confirmed at the meeting of the class that afternoon. I looked hard at Señora Migdalia Perez, who glanced archly at me over her fan, then quickly covered her face, only to smile at me in a moment, the fan held coyly at her left ear. At the end of the class I drew Guillermo aside. "Look," I said hoarsely. "Did you *sign* that poem you sent to Señora Perez?"

He shifted uneasily. "No, not exactly," he said. "I thought it would be easier to wait a little while before I sign my full name to the poems I shall send her." He looked me in the eye and added stoutly, "I did, however, sign my initials — G.C."

"Do you realize, Guillermo," I said, "that Señora Perez thinks I sent her that poem? My initials are W.C., but since my first name, 'William,' is 'Guillermo' in Spanish, she probably assumes that I'm using the Spanish form."

Guillermo shook his head and spread his hands in a gesture of hopelessness. "Then there is no hope for me," he said ruefully. "It is you she loves."

I gripped him by the shoulder. "Right now, Guillermo," I said, "you are going to sit down,

copy a poem, and, in my sight, sign it and mail it to the Señora Perez. You needn't bother to translate it."

Guillermo protested, but my anger must have impressed him, for he reluctantly complied. He chose Shelley's *Love's Philosophy*, copied it from the anthology, and signed it. We then went to the University Post Office, where he put it in an envelope and mailed it to Señora Perez.

An access of timidity apparently prevented Guillermo from coming to class for the next two days. For my part, I was relieved to find that Señora Perez now regarded me indifferently over her fan. If anything, there was slight hostility in her expression, which I suppose would be natural under the circumstances. She spent most of her time in class casting reflective glances at the empty seat beside her.

I met Guillermo on the bus Thursday afternoon on the way to the University. He seemed very much excited as he took from his pocket and handed me a strongly perfumed paper, on which was copied Shakespeare's sonnet

Is it for fear to wet a widow's eye
That thou consum'st thyself in single life?

"Very appropriate," I said. "Congratulations, Guillermo."

Guillermo fidgeted on the bus all the way to the University, and once in the classroom he lowered himself nervously into the seat beside Señora Perez. She bowed graciously to him, and smiled at him over her fan. Neither of them, I observed, paid any attention to what I had to say about Wordsworth during the hour. At the end of the class, Señora Perez started talking earnestly to Guillermo, and for the first time I saw Guillermo smile.

I saw very little of Guillermo after that, for Señora Perez lived on the opposite side of town, and he began escorting her home. Now and again, however, I would meet him on the bus on the way to the University, and he would tell me that his suit was progressing admirably. He had lost his timidity, he said, when he had found that Señora Perez was a lover of poetry, too.

Shortly after I had returned to the States in September, I got a letter from Guillermo, telling me of his engagement to Señora Perez. In the same mail was a package containing a vellum-bound copybook in which Guillermo had written out all the poems he had translated during the summer. I was pleased to see that the later poems were not melancholy in tone. The last poem in the book did bother me a little, however. It was Elizabeth Barrett Browning's *A Woman's Shortcomings*.

19570

H-Bomb

A mathematician and philosopher of science whose ideas played a significant part in the development of communication and control which were essential in winning the war, NORBERT WIENER of Massachusetts Institute of Technology has been outspoken in the discussions of atomic energy and of the responsibilities of the scientist. He is the author of Cybernetics, and his new book, The Human Use of Human Beings, is to be published by Houghton Mifflin this August.

TOO DAMN CLOSE

by NORBERT WIENER

1

SOME of us have had the experience of seeing hung behind a car an intriguing little plate which excites our desire to find out what it is all about. When we have succeeded in maneuvering ourselves behind the car at a stop light, this plate carries the very disagreeable message: "If you can read this, you are too damn close!"

I must say that I do not approve of this way of conveying a message by inducing the recipient to contravene the orders it contains. Nevertheless, the sign is very significant. We may find ourselves in a position behind a preceding car which does not of itself imply a catastrophe, but which may instantly become one by any sudden braking of the front car, or by any emergency which may face us around a corner.

The country has recently been flooded with a series of books on atomic warfare. Some of these tell us how close we may come to world destruction and still not be destroyed. This may be a valid message, if only the road is clear and no new emergencies face us around the corner. The author of one of these books has told me personally that his purpose is to show that another war will not necessarily be fatal to civilization. This military version of "Another little drink won't hurt us" shares much of the unconvincingness of the alcoholic assertion on which it is patterned. Another little drink is going to hurt us, and this is the reason why.

The author of the comforting statement in question is a well-known engineer. The engineer must be accurate in estimating the powers and significance of existing pieces of apparatus. He can tell us if a bomb drawn to certain specific plans will exterminate everyone within a radius of 2000 feet, or only within a radius of 1800 feet. However, the traditionally trained engineer does not like even to consider the possibility of a piece of apparatus for which he has not yet received the blueprint. Nevertheless, the level of invention is continually shifting, and part of that future which we have to allow for in any path of human activity is the future of the art of invention itself.

Note that the economic forces of our society compel the inventor to assume an ambivalent attitude toward his work. No man can be an inventor unless he has developed an apparatus going beyond those before him. At the same time, when he has developed this apparatus, he has the problem of exploiting it. He must make his fortune in the possibly short period which elapses between the completion of his own invention and the arrival of the next one to make it obsolete. Thus, once his invention has been made, there is no more desperately conservative soul than the inventor. The man who invents an analogy computer will fight tooth and nail before he deigns to admit that the digital computer may have some legitimate advantages; and the man who invents the mechanical type of digital computer will see himself almost drawn and quartered before he recognizes the electronic computer as its destined successor.

Now, the atomic bomb and its monstrous progeny do not represent a static discovery. They represent a very active stage in the course of developing science.

Nuclear physics was born in the work of the Curies. From then until the first time that Cockcroft and Walton were able to produce transmutation in a normally stable element was a matter of thirty years. From the time of Cockcroft and Walton to the first large-scale production of energy derived from nuclear sources was no more than a decade. In the few years which have passed since the explosions of Los Alamos, Hiroshima, and Nagasaki, progress — with all its devils — has been made by leaps and bounds.

The present situation is this: We know of quite a number of reactions of the nuclear type which take place in the sun and in the stars. We know a considerable amount concerning the conditions which are necessary for these reactions to take place. Some of them have been duplicated on the earth, and others which have nowhere been observed in the heavens have been performed for the first time on the earth.

The great difficulty with these reactions is that although they generate enormous concentrations of energy, they cannot occur except in situations in which enormous (although often smaller) concentrations of energy have already been generated. We thus find a certain interplay of the nuclear reactions and of our possibility of further experimentation.

I know nothing specific about the proposed hydrogen bomb except that it involves reactions of a type known to occur in the sun. To trigger these reactions, there is needed something not too remote from solar temperatures and pressures. The natural place to seek these is in the neighborhood of the atomic bombs which we have already created — the uranium or plutonium bomb. In other words, in some sense or other, we may expect the hydrogen bomb to have a primer of the character of the atomic bombs already known to us; and we may further expect it to serve itself as a primer for even more potent reactions.

The ultimate limit to which Einstein theory permits us to go in the transformation of matter into energy is the complete transformation. This is hundreds of times more potent than any atomic reaction of which we have as yet made use. It could be obtained if we could bring an accumulation of electrons into close enough contact with an accumulation of positrons. Up to the present, the positrons have been among the most intractable members of our repertory of primitive particles; but there are signs that this intractability may be only a thing of the present.

What has happened is that we have discovered a considerable number of new intellectual and experimental tools for handling the atomic nucleus. Some time may come when these exploratory tools may be used to the limit, and yield nothing new. Nobody is ready to believe that this time has yet come. We are in a situation analogous to that of the liquefaction of gases toward the end of the last century. Then each liquefaction of a new gas rendered possible the liquefaction of a more refractory one. That sequence of discoveries and techniques did indeed come to an end, and that end was permanently obtained by the liquefaction of helium — the most refractory of all gases. In other words, it came to an end only when it could go no further.

2

UNDER these circumstances, it is sheer folly to estimate the social consequences of atomic physics on the strength of what we can knowingly accomplish with the present atomic bombs. The first group of bombs, those of Hiroshima and Nagasaki, numbered their dead in tens of thousands. The experiments of Bikini made it clear that even these primitive bombs might have vastly increased their total kill if they had been used to inundate a maritime

city with a spray of poison water instead of being used for the sake of a detonation well above the surface of the earth.

After Bikini, there was a period during which the experts estimated from 100 to 1000 to be the number of bombs needed so to poison the atmosphere that a permanent effect was to be expected on the whole heredity of the human race. There have been various revisions of this estimate, and it is quite possible that it is too small. The new hydrogen bomb has so far displayed its power only in estimates, but its sheer power to scorch and burn appears to be of the order of 1000 of the Hiroshima bomb. It seems possible that it may be so used that its poisoning of the atmosphere is of far less relative importance than that of the uranium or the plutonium bomb. Note well, however, the precise words of this statement: "it may be so used." It seems equally clear that if it succeeds at all, and most atomic physicists estimate that it will succeed, it may also "be so used," in connection with metallic powders and dust, that its poisoning power is quite on a par with its searing power. If this is so, we are but one step or a step and a half from a weapon which may well give the *coup de grâce* to the whole human race.

It may be thought that even with the very rapid progress of invention in matters concerning atomic bombs, when the stage is really reached at which the makers of policy will themselves become aware that the atomic bomb is a threat to their lives, we shall then suddenly back water and adopt a policy looking forward to universal peace. However, to defend ourselves from a catastrophe by the very imminence of the catastrophe is very far from wise. To begin with, one of the two sides may come to this awareness of the catastrophic possibilities of its own bombs later than the other. We have hardly as yet reached the freedom of communication between antagonists that allows us to say to Mr. Stalin, "Look here, you may not know it yet, but if you use your bomb to blow us up, you will poison your own atmosphere so that the end of the United States will be the end of Russia, and the whole world will be one great shambles."

In addition we have the fact that human blunders are even now being made, and will be made, such as those which lead to the grounding of ships. This is a field in which we are "supposed" to have an adequate know-how. The sanctions obliging a captain to look after the welfare of his ship are quite as psychologically cogent as those which might deter him from blowing up the human race. It is not that the act in one case is as serious as the act in the other, but that in both cases the sanctions are fully as strong as the moral judgment — and the character — of the officer concerned, and they can be no stronger. In the grounding of the *Missouri*, it is quite clear from the captain's own statement that he went ahead when he had insufficient information

as to the nature of certain buoys which he had sighted, and that when he had asked his junior officers, he received no answer which caused him to hesitate in his conduct. It appears that one officer present knew of the unwisdom of the course adopted, but he was *so* junior that he did not dare to tell his superiors about it. This conduct is reminiscent of what happened to King Stanislas of Poland when, in a bout of drunkenness, he fell down one of the chimneys of his palace in Nancy and there was no person present who had a sufficiently elevated rank to be permitted by court etiquette to touch the body of the king.

I ask, What omens do these examples of human folly offer for the proper control of the atomic bomb? Even in peacetime, after the browbeating they have received, atomic scientists are at least as loath to give effective but unpopular advice to generals as were the servants of King Stanislas to profane the Royal Person. In wartime, the situation is aggravated twofold, and only those scientists who happen to have been passed by the FBI and admitted to the Presence will have any chance of preventing a catastrophe which only some obscure worker may have foreseen. Etiquette must be observed, and to hell with King Stanislas and the human race!

The average American, informed only by the press, fears Russia. He is of the opinion that in our diplomatic exchanges with Russia in connection with the atomic bomb we have gone to the extreme of what we can do, and that no problem will be solved by further negotiation. There is no doubt whatever that the Russians are among the hardest people in the world with whom to bargain, but there is in my mind a very considerable doubt as to whether, in view of the nature of atomic warfare, we have gone to the limit to which we should have gone, to come together with them and avoid catastrophe. Our earlier proposals were made under the assumption that we alone possessed the atomic bomb, and during a period in which we most definitely felt that there would be a considerable delay before the Russians' know-how might enable them to compete with us in this respect. During that period, we stated our offers in such a way that they involved a certain type of machinery of inspection which the Russians, who took the situation as emotionally as we ourselves did, felt to be a threat to their national integrity. The later negotiations have been carried out under the regime of a cold war which is equally unlikely to lead us to a successful understanding. The very idea of temporizing with Russia in any matter has been made so hateful to the people of the United States that for some time now a statesman who ventures to suggest it has become likely to find his authority cut off at home.

Nevertheless, in view of the significance of modern means of warfare, this emotionally distasteful mode of procedure is all that is left for us, and all that is left for Russia. Whether we like it or not, the Russians and ourselves are living on the same planet. The conversion of this planet into a lifeless desert, either by a sudden catastrophe or through a mounting sequence of misfortunes, would be quite as annoying to them as to us. Fundamentally, they can have no more desire than we to celebrate a nominal victory by a universal funeral pyre of both sides. They share with us a healthy hope for a longer span of life on this earth.

Once we realize the devastating power of the next atomic bomb and the fact that before another war comes it may well be this bomb with which we have to deal rather than those which face us now, it becomes clear that our situation vis-à-vis Russia is that of two men locked in a small cellar, each holding a hand grenade. They hate each other, but they are not suicidal men, and each has a desire to survive. Under these conditions, the hand grenades are totally without function. Whoever throws one may smear his opponent on the wall a little more completely than he does himself. But this is not an important matter.

This is not important if the two opponents have a sense of fact. If either of them has his mind so obfuscated by propaganda that he considers the slaughter of the other as a triumph which is only slightly marred by the danger to himself, then we may see a totally stupid annihilation of the two. So long as we are dominated by a rigid propaganda which makes the destruction of Russia appear more important than our own survival, the risk is present. Our hope is that we may meet a tough but realistic adversary by a humane but realistic attitude. The Russians because of their very totalitarian nature are less likely to be led to catastrophe by a psychopathic wish for self-destruction.

If we were now fighting Hitler's Germany this would not be a valid statement. The Germans were full of a belief in glory, and of a somewhat wistful admiration of self-destruction. Hitler was not totally displeased by ending his career in suicide, and if this suicide could have torn down his opponents with him, he would have been delighted. Indeed he envisaged himself as the Samson of the temple of humanity. The Russians, on the other hand, have no intention of salvaging their glory by suicide. They intend to live, and it is this very desire for life that makes them so tough.

It is thus the very hardheadedness of our enemies that gives us our best hope for something short of race suicide. If we meet the Russian toughness by an attitude which contains an equal willingness to acknowledge facts when they are facts, it is quite likely that we can avoid the explosion in the cellar.

College Entrance

By underlining the right answer in a multiple-choice test the student can show "scholastic aptitude" and a capacity for college work. But how shall the college judge his common sense and what the student can bring to bear from his own experience, both academic and practical? FRANK D. ASHBURN is headmaster of Brooks School, North Andover, Massachusetts, has served in various capacities on the College Entrance Examination Board, and is at present chairman of its committee studying the current achievement testing program of the Board.

HOW DO YOU TEST A STUDENT?

by FRANK D. ASHBURN

I

ONCE upon a time an examination was something which supposedly measured how much you knew (that is, remembered) about something you had studied in the reasonably recent past. It represented a contest between you and the examiner. If you demonstrated that you knew enough to "pass," all was well; otherwise you failed, even though you had abilities that might make you outstandingly successful in later life. Usually you knew what you would be examined on, and by real effort, either on your part or that of somebody better qualified, you could get a good mark.

Such a concept of an examination is becoming less general. There is a possibility that recent changes in the idea of what an examination should be and do will profoundly affect the course of intellectual and cultural development in the United States. Many teachers feel that an effect is already discernible.

To estimate that statement let us examine the evidence at just one critical point, that of transition from school to college. It is obvious that only a portion of the American school population is involved in such a transfer, and that it is the elite portion academically. But for that very reason it serves as a good illustration of a trend. And in weighing the effects of new types of testing in that portion, let us confine our attention to an outstanding agency involved, which is the College Entrance Examination Board.

The College Board was born fifty years ago, with Nicholas Murray Butler and Charles W. Eliot as godfathers. It was intended to do away with chaos, in a time when every college had its own entrance requirements, by establishing a single set of standards for examinations and reliable machinery for administering and correcting them.

It was never intended that the Board itself would admit or reject any applicant. It has always left the function of selection entirely to the colleges.

The Board is merely the agent of interested schools and colleges, both of which are amply represented in its councils, with powers of veto and initiative. This coöperation is itself a significant educational development.

For many years quiet growth took place. Each June and September a series of examinations was given. These papers were usually either two or three hours in length. The aim of the examinee was to get a 60 (pass). If he got an 80 it was an honor and so reported. In due course two "Plans" emerged, with periodic variations. One, the Old Plan (later Plan A) was a pay-as-you-enter scheme. Papers were taken over two or three years as courses were completed. When fifteen "points" were accumulated, sometimes quite late in life, it was generally held a college's duty, if only as a sporting proposition, to admit the persistent candidate. This arrangement gradually gave way to Plan B, which required a single set of examinations on the work of senior year in high school. The candidate staked his all on these, unless a good school record could be counted on to salvage his collapse in examination week.

The examinations were based on fairly definite requirements. An experienced teacher or tutor could, and usually did, anticipate a considerable part of an examination in any given year. It was a system which favored the private or independent school and capable tutor, while often working against public school candidates, who, though able and in good schools, were handicapped by teachers' lack of familiarity with the College Board type of examination or by their lack of time and means to prepare for the high standards met there.

Meanwhile a considerable development of objective or multiple-choice tests had taken place. The difference between the subjective examination and the objective test is illustrated by the following oversimplified examples:—

Subject: Discuss the consequences of the Dred Scott decision.

Objective: The chief justice in the Dred Scott Case was (underline one): —

- 1) John C. Calhoun 2) Roger B. Taney
- 3) William Lloyd Garrison 4) Salmon P. Chase
- 5) Stephen A. Douglas

It will help to keep this comparison in mind.

The development of objective testing came with a rush because of the war. The armed services had to have huge quantities of reliable easily administrable and correctable tests in a hurry. The College Board was outstandingly qualified to do much to meet the need, both by organization and experience. Almost overnight the whole apparatus of objective testing increased enormously. It had a chance to demonstrate its possibilities and to undergo refinements on a prodigious scale, while subjective testing, so far as the College Board went, practically disappeared. Which meant it disappeared so far as college admission went, too. It has reappeared since only in the shyest sort of way.

2

A COLLEGE candidate today is tested in an entirely different manner from his parents. The multiple-choice test, developed by experts, proved a surprisingly successful instrument in measuring ability and, in certain respects, achievement also. For instance, the present achievement tests, which take only an hour, predict more accurately than the former two- or three-hour examinations ability to do college work in most subjects. Why and how? Partly because the tests are constructed with such meticulous care, every item being thoroughly pre-tested. Since the answers are of fact (to reach them may require real thought, but the answers themselves are factual) there is no question of one examiner's opinion differing from another. An answer is right or wrong, and the element of human frailty which has always plagued givers of marks is removed. In fact it is removed to such an extent that much, if not most, of the correcting is done by machine, which is characteristically indifferent to opinion.

Of its nature, an objective test cannot measure certain things, such as style, organization of material, or power of coherent argument, but these are in themselves matters of opinion, and opinion is a variable which your true tester loathes like poison. The minute you introduce even the possibility of it you lose reliability, and reliability is what born testers love above all else.

Objective tests have additional virtues. They are economical in time and money. Instead of a week of examinations, a modern college candidate takes all his tests in one day, and the saving in food and lodging is considerable. One day, and the thing is done.

No matter how strongly teachers feel about the disappearance of the essay-type examination (and some of them feel violently), the statistics seem to show that the Scholastic Aptitude Test of the College Board is the best *single* predictive instrument for foretelling academic success in college. The thing it measures is just what its name implies — scholastic aptitude; that one thing. When a physician places a clinical thermometer in your mouth he learns whether you have a temperature or not. He does not learn why you have a temperature, nor whether your condition is likely to be chronic or fatal, nor what he should do about it. But he does know one important clinical fact about you. In the same way, these objective tests produce certain bits of evidence which are highly significant so far as educational prognosis goes. The medical analogy breaks down in one respect. If you have a temperature the thermometer will show it. You cannot avoid it by not trying. Whereas if you don't try in taking a test, you can do just as badly as though you were really stupid.

The emphasis is on potential ability in a restricted sense. It is not on finding out whether a candidate has studied certain material or remembers particular facts. It is on finding out what his chances are of doing college work, which is quite different from finding out whether he can pass a course. And since the emphasis in college admission is now on ability, it follows that there is less emphasis on training and on qualities such as stick-to-itiveness and common sense. An important further result, since a school can train a boy to handle given material, but cannot make a dull boy bright, is to take away an advantage formerly enjoyed by the independent school on College Boards and bestow it on the much larger group of bright boys in the vast public school population.

Let us see how this works out in practice. A candidate registers for College Board tests at one of the five sessions held during the year. Of these the spring program is much the most commonly required, and the number of candidates now involved in it runs into tens of thousands, a huge increase over a few years ago. In 1950, on the morning of March 11, each candidate presented himself at a testing center. He did his work as a number, not as a name. It is easier to penetrate the inner mysteries of Oak Ridge than to break the security measures of the College Board. Between 9 A.M. and noon he took the Scholastic Aptitude Test, which yielded two scores, one in Verbal, the other in Mathematical, Aptitude. Preparation for either portion of the test is held undesirable and impracticable. It is recognized that these two abilities may differ sharply in an individual, and the distinction between them is carefully preserved. Some colleges require only the aptitude test; all welcome it.

After an interval for lunch and recuperation,

most of the candidates returned for three one-hour achievement tests, based on the work of the current year, and chosen from English, mathematics, a language (French, German, Latin, and Spanish for the most part), science (biology, chemistry, physics), social studies (a single paper), and a straight special aptitude test called Spatial Relations. Most colleges like as wide a sampling as possible. The questions seem deceptively simple, but require both knowledge and intelligence.

No mark, in the ordinary sense, is given. There are only scores. There is no such thing as a pass. In each test the "raw" score (that is, the exact number of correct answers) is distributed along a scale of 800. Each score is placed in its relative position on this scale, with a new score, in terms of the scale, now given it and replacing the mark of old days. A score of 500 indicates a number of correct answers which is exactly in the middle of all the raw scores on a given test. Any score of 700 or up means the candidate is in roughly the top 3 per cent of all scores; a score of under 400 means that he is roughly in the bottom 15 per cent. At this stage the candidate resumes his identity. His scores are reported to the colleges and his performance is registered in terms which relate it to the scores of thousands of other candidates. In other words, the present College Board system is strictly cutthroat competition and, to repeat once more, emphasizes scholastic aptitude, which it is able to identify with embarrassing accuracy.

Economy, reliability, simplicity, and one other great thing have been achieved. That other thing is the freeing of schools from any restrictions as to course content, diploma requirements, or pedagogical method. A school may arrange its curriculum as it likes; it may follow its own inclinations to an extent never possible before.

Despite this new freedom for the schools, the greatly increased use of Board tests implies a trend to unity. That trend is further indicated by the formation, two years ago, at the instigation of a committee headed by President Conant, of a super-organization in testing called the Educational Testing Service, to which four large testing agencies (the two biggest of which were the College Board and the Co-operative Test Service, the latter the testing arm of the American Council on Education) voluntarily surrendered capital and numerous prerogatives. The ETS has already moved towards singleness of purpose and administration in the great testing movement, and it could develop into an educational supertrust, in terms of influence, with all its concomitant advantages and dangers.

The College Board, while yielding both revenue and much administrative detail to the ETS, has held on to its main function, which is that of determining the fitness of candidates to move from one particular educational level to another. It now offers tests in many fields above the point of transition

from school to college, and these tests are almost wholly multiple-choice. For years the College Board has set the pace; the results it has achieved have been on the educational gold standard, and its influence has been out of proportion to its membership. Its trend may therefore be regarded as pointing the course of American educational practice in the predictable future.

3

WITH so much to be said on the positive side, is there a negative case? It must at least be stated that a degree of uneasiness about the status quo exists in the minds of the members of the Board, some of whose most severe critics are at the same time among its warmest admirers. Many teachers resent the Board's not checking on whether a student has done any work in a course, and worry that what testing there is takes place long before a course can be finished. This objection rests to some extent on a misapprehension, inasmuch as the Board has no intention of testing specific content and considers such testing entirely up to the schools themselves.

Nevertheless it is true that at the present time there is no College Board test which could be called terminal — that is, which measures the performance of either the student or the teacher in terms of a year's (or several years') completed work. The possibility must be faced that the cumulative effect, through several generations, of not having such a measurement, even though ability alone may be thoroughly estimated, may have serious consequences for American teaching and learning.

There is general agreement that the objective tests represent a real educational gain and that they make available a form of evidence and a simplicity of administration hitherto lacking. At the same time, there is an increasing, though as yet minority, feeling that when the essay or subjective type of test was abandoned, there ceased to be any testing by the Board of certain crucially important educational values, and that unless these values are re-emphasized, the long-range effect on American education will be most unfortunate. Many teachers have felt the lack of an educational ingredient which might be defined as the power to deal cogently and lucidly with ideas synthesized from reading, instruction, and experience, both academic and practical. Such teachers believe that the development of this ingredient is the hallmark of a good school and its possession the best indication of good college material and, indeed, of good education at any level. This is not being tested by the College Board at the present time.

Another fear is that the emphasis on ability has resulted in a decline of emphasis on such immeasurables as workage and loafage. Some feel that the brilliant idler is not as good a bet as the sound,

reasonably able person who is willing to learn. They hold that character, if it is still valued, can be just as important as naked ability, though it is difficult to test objectively. And they hold that ability thoroughly trained is better than ability untrained.

Then, too, the very virtue of complete freedom for the schools, desirable as it is, raises the question as to whether complete freedom (since it must mean, if complete, freedom from standards) will not lead to something savoring of anarchy, as happened with the originally virtuous elective system. No one wants to return to chaos and old night; everybody wants ability; but many feel that ability steeped in proved values is better than ability alone.

Today's situation is that the colleges, so far from dictating what the schools should teach, give them a minimum of guidance and restraint. I would hazard the guess that within ten years, if this tendency is unchanged, the colleges will regret their generosity. If schools don't have to teach grammar, they won't teach grammar; if they don't have to teach the geography, simple biographies, and stories which are the vocabulary and grammar of the social sciences, they won't teach them — which means the colleges will have to. The schools will teach a lot of other things, probably worth while, but they won't teach such basic simplicities as require hard mental work if they don't have to. It would be unwise to confuse the needs of the many with reasonable demands for the able minority. We speak of the college level as higher education. Unless it has intellectual integrity it is not very high.

There has never yet been a decisive examination which did not materially affect the work done in preparation for it, as there has never yet been a system of testing for which competent teachers did not eventually find a means of preparation. In theory one of the beauties of the objective test is that one cannot prepare for it. But teachers whose professional reputation and whose bread and butter depend on preparing for it are giving, and of course will give, the matter their best attention. If they can find an answer, it will neglect things not needed for tests. If they cannot find an answer, the tests do not require that very kind of training the lack of which is probably the most serious weakness in American secondary education today.

4

IT IS easy to express forebodings as to testing in America. Is it possible to foresee measures which might prevent suggested dangers while guarding proved merits? To underestimate the difficulties of restoring any form of subjective testing would be folly; they are real and weigh heavily with experts who have given their lives to the cause of American education.

The wave of increased enrollment now rushing upon American education suggests the following conclusions: —

1. There must be an enormous increase of schools and colleges. It is already clear that a new type of educational institution, the junior college (a most unhappy name; what is needed is not an ersatz college, but something quite new and terminal and sufficient unto itself) is emerging. It is properly suggested that requirements for and after entrance to such academic levels should be different from those in the four-year colleges. This does not or should not mean that four-year requirements should be lowered. There is no magic in any given number of years or courses, but a college education implies setting and preserving standards.

2. It is inevitable that any such educational inflation as can alone provide for the tremendous expansion which is coming (as heralded by the President's Commission Report and numerous other prophecies) will result in a lowering of teaching standards and therefore of educational quality in the United States. This condition might be temporary, although the evidence is that devaluation rarely results in revaluation to original worth. The condition will certainly be acute while it lasts, simply because no nation can find quickly the number of adequate teachers we shall need.

Our national duty to provide educational opportunity for all is clear, but it would be a slow intellectual suicide to take care of the many at the neglect of the relatively few really able. These able are there; the public schools are rich in them, and in many cases they are wasted by being fed on scholastic pabulum when they need red meat which requires mental chewing. Gresham's Law works in education as elsewhere. This is not a matter of private versus public education. One can be for public education, junior colleges galore, believe enthusiastically in the independent schools, and still think that such variegated places as Harvard, Haverford or Swarthmore, the University of North Carolina or the University of Minnesota, have crucial contributions to make to national life.

In aiming at our laudable goal of more education for all, we would do well to avoid falling into the soft fuzziness of making education for everybody easier at a time when what we desperately need is to make it a lot harder for those who are able. There are exceptions, but by and large our school standards are too easy for the outstandingly intelligent. If the conditions I have just mentioned materialize, students will need all the academic starch which can be put into them.

Therefore, while a great testing organization such as the College Board should do all it can to make for better testing of many sorts, one might maintain that it has an obligation to its own traditions and high standards to devise the best testing it can, regardless of time and expense, to find what boys and girls are really fitted for higher education,

and to do everything it can to ensure their receiving the best all-round preparation for it.

By fairly common agreement there is merit in both objective and subjective testing. This is not an either-or problem. The ideal is neither alone, but something of both. Such an ideal would permit terminal tests as well.

The essence of the whole matter is whether the current trend in testing is thoroughly wholesome or not. To say it is excellent as far as it goes is not to justify it; nor is it justified by saying that the schools do not prepare for anything better, nor by recognizing frankly that the ideal would be both hard and expensive to attain. Nothing short of the best possible can be considered adequate. If what is adequate can be obtained only at increased expense, it is still a bargain for the commonwealth and for private citizens. To rest content with the partially satisfactory because it saves a few dollars and a lot of trouble is mighty poor economy.

College education is not the same thing as education for all members of a free society. They overlap and interplay, but the average citizen neither needs higher education, nor is capable of it, nor will confer benefits on society because of it; whereas advanced knowledge and power of deep reflection have an indispensable function in any civilized society. All men and women need the education essential for members of a free society; all benefit by making sure that those fitted for it receive a higher education.

A person will have ability to some extent whether trained or not. But the point of any formal educational process is to provide organized training which will eliminate as far as possible the risks of chance, while making sure that the individual

benefits by the cumulative experience of the race and by the interpretation of that experience through the spirits of the wise and the learned. And a testing procedure which detects and encourages not only ability, but the trained use of that ability, surely contributes both to wisdom and its use.

It is idle to inveigh against the College Board or similar testing services as entities. No one can work with the officials of the Board without being keenly aware of their high-minded devotion not only to their immediate duty but to the cause of American education. They are agents, not masters, of those interested in testing, and their anxiety to do what is best is constant. Like all good agents they are bound by economic facts, by the most material and practical considerations, by the wishes of those they serve, and by a specific duty to weigh the merits and demerits of all suggested change. They are also professionals and specialists, keenly aware of amateurish vagaries. By rushing from one quick idea to another they could obviously do a great disservice. If real changes are to occur they must come not by the highhanded will of the agents alone, but by the wish and consent of the parties concerned. A great deal of thought has already gone into the problem, and, judging from past experience, changes will take place and remedies will doubtless be found for all these dangers.

Meanwhile, the ambitious college candidate or his equally ambitious parent would do well to realize that things are no longer as they were *consule Planco*. The modern test painfully, and perhaps wholesomely, makes it evident that not all people who would like to go to college are as smart as they might be when it comes to book learning — not even some very intelligent and useful citizens.



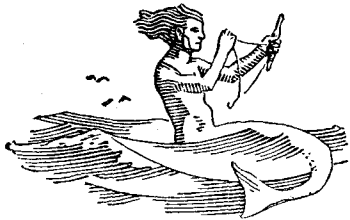
CORNER OF MAIN AND BROAD

by JOSEPHINE YOUNG CASE

BETWEEN the coming and going, on the yellow light,
Can you propound a reply to the definite question,
And before the foot moves to go forward, know you are right?

Not only the route, but the ultimate destination;
Not only the how and the who but the when and the why,
Above all the why; can you answer without hesitation?

Four seconds between the red and the green to comply;
If you are unready not even a day and a night,
Not even a day and a year will serve to reply.



An Atlantic Story



"When I was a kid," writes RICHARD BISSELL, "I floated down the river twice and bummed the freights home." Then, after graduating from Phillips Exeter and Harvard, he returned to Iowa and again went on the river. He worked on the Monongahela, on the Ohio, the Missouri, and the Upper and Lower Mississippi, first as deckhand and then as mate and pilot. The story which follows is taken from his first novel, A Stretch on the River, which will appear as an Atlantic-Little, Brown book. The Atlantic, which published Mark Twain's Life on the Mississippi, is happy to find a worthy successor in Dick Bissell.

FACING UP

by RICHARD BISSELL

WE WERE out on the foredeck. "What's the matter, stud, didn't you never see the sunrise before?" the Second Mate said to me.

"Not since I can remember it," I said, looking at the pink clouds over the Illinois hills.

"Well, you're not likely to miss a single one from now on," he said. "Pretty, ain't it?"

The other two deckhands on the watch came out on deck pulling on their gloves.

"Shorty, you and Diamond go on out and clean up the rigging on the head of 112," the Second Mate said. And to me he said, "Come here, stud, I wanna talk to you."

He sat down on a timberhead and watched the sunrise. He was about thirty-five years old and his face and his Grecian nose were tanned from twenty years of river weather. I liked his blond hair sticking out from under the blue Mate's cap, and better still his mouth, which seemed much more inclined to smile than to sneer. Evidently things had not yet begun to get him down. He was about six feet of Mate, with shoulders to match, and I wondered how many girls he had on the Upper Mississippi.

The deckhands went out on the barges.

"They're sending us some strange ones these days under the name of deckhands," he said, "but up to now we ain't had no college boys. What the hell's the matter with you, stud? This job is too rough even for a farm boy."

"What gives you this college boy idea?" I said.

"Why, kid, it was sticking out all over you when you come aboard."

"I suppose it was. How was it?"

"First you had on a hand-tied bow tie instead of the jazzbow model. Next your short haircut. Last, when I showed you where your bunk was at in the pigpen you says 'Thanks.' Now nobody but a college boy would be enough of a fool to say 'Thanks' for an introduction to a dirty bunk. You college boys are all the time saying 'Thanks,' 'Thanks a lot,' 'Thanks old boy,' and all that crap. If you would of growled a little bit or maybe cussed the company when you seen your luxurious sleeping accommodations, I wouldn't of been so sure, in spite of the bow tie."

"Well," I said, "I can let my hair grow out easy enough, throw away the bow tie, and eliminate the 'Thanks old boy.'"

"Yeah," he said. "You ought to do that. That is, if you was going to stay. But you ain't, stud, you won't be on here long enough to tell the bow from the stern."

"Oh yes I will," I said. "I'll be around for a while. Anyway long enough for my hair to grow out."

"No you won't, kid," he said. "I hate to tell you, but the truth is, you'll never even see St. Paul. This here is the craziest life on earth, and for a guy who ain't use to misery a deckhand's life is unnecessary torture. You'll soon see there ain't no sense to it."

"I'll be here when we get to St. Paul," I said.

"No you won't. You'll be all disgusted before we get to Rock Island. By the time we get to Lynx-

ville you'll get off, if you can crawl by that time."

"Listen, Mister," I said, "how about me going out and getting to work with the rest of the watch? If it's so damn rough I'll get off, if I like it I'll stay."

"Well, you ain't gonna like it. And on the river you don't need to call me Mister. My name is Joe."

"You're the Mate," I said. "I better not call you Joe."

"Listen stud, relax. This ain't the *Queen Mary*, just an old Upper Mississippi towboat that needs an engine overhaul. Everybody from Minneapolis to Cairo calls me Joe, so don't feel it's a treat."

"All right," I said.

"Your problem is gonna be keeping up with the work and trying to get enough sleep to keep alive. If you can hold out for a month without getting discouraged you might make it, if you're stubborn. If you're really set on staying here, keep pretty quiet for a while until the other deckhands get used to you. Do your work and keep your mouth shut. If they see you can hold up your end making tow in a rainstorm they'll soon forget about the college stuff. Don't try and big talk the other deckhands. Pretty soon you'll find them giving you a few pointers on the work. Watch what they do. Watch how they pick up a ratchet and set it on their shoulder. This Shorty on your watch is one of the best deckhands on the Upper River. Just study him and do like he does and someday you'll be a deckhand." He lit a cigarette and threw the match in the river. "Then you can write the president of that college and tell him the big news."

"All right," I said. "I'll do what I can."

"You can't do no more than that," Joe said. "There's one thing you can do for me, though."

"What's that?"

"Show me how to tie one of them god damn bow ties."

2

THE morning wore along and I followed the other two deckhands around. I found out I didn't know anything worth knowing. I couldn't see any sense in most of the things they were doing but I didn't let on.

Then there was the matter of carrying ratchets.

"Go ahead, let me see you pick it up," I said to this sawed-off deckhand they called Shorty.

"Well, you just grab her by this here link and up-end her, get your shoulder down a little, toss her on your shoulder and raise up." Shorty went through all this with beautiful precision and ended up with the ratchet over his shoulder.

"You make that look easy," I said.

"Aw listen, don't you worry none, I couldn't do it neither when I first come onto a steamboat," he said. "I use to pick 'em up by main strength

and awkwardness and carry 'em in my arms instead of on the shoulder."

Shorty's homely face and crooked grin made you want to laugh. With his shaggy hair and awkward gait he had *farmer* written all over him. And although he'd been on the river for years he still wore his farm clothes — blue bib overalls, blue chambray shirt, blue denim harvest jacket, and hickory-stripe shop cap. He wasn't so short, but he was stocky, and the name seemed to fit. And he was a real person, nobody ever laughed at him.

The other deckhand was leaning against the main capstan. He wasn't giving out any information.

"Now leave me see you pick it up," Shorty said.

I'd been sitting around the bar at the Sixty-Six so long about all the muscels I had left were the ones in my fingers from holding onto a glass. Well, I got the ratchet up on my shoulder but I was about through for the day and ready for a rub-down from the effort. A ratchet is a double-end screw jack weighing about the same as Stanislaus Zbyszko.

"I guess you ain't been workin very hard lately," Shorty said.

The other deckhand looked like he agreed with this analysis. He said nothing, however.

"Now, when you throw her down, get out of the way as she's droppin so you don't get a link on your foot. Duke Robinette off the *James W. Good* is up at the St. Louie marine hospital right this minute from droppin a ratchet on his foot. I seen the Mate down at Wood River last night and he told me. 'How did it happen, Blackie?' I says. 'Why the dumb Peoria bastard dropped a ratchet on his foot, that's how it happened,' he says. 'I never dropped one on my foot yet,' I says. 'Turtle Peterson over on the *Locke Tarleton*, he dropped one on his foot when we was up Cumberland River, two years ago Thanksgiving,' he says. 'I ain't seen Turtle since we was on the *Black Diamond* together,' I says. 'He never dropped no ratchets on the *Black Diamond*,' I says, 'because he never had abolt of one. He was layin asleep in the deck room most of the time.'"

"The *Black Diamond* burned up down on the Ohio," the other deckhand said.

"Now listen," Shorty said, "don't I know the *Black Diamond* burned up down on the Ohio? Don't I know it was right below Caseyville? Don't I know Cat Brown burned up on her? Don't I know it was on a Christmas Eve and the engineer was drunk? Don't I . . ."

"All right. All right," said the other deckhand.

"Listen," I said, "I gotta learn how to splice. They'll probably fire me if I don't learn to splice."

"Have you got leprosy or third degree cholery?"

"Not that I know of," I said.

"Well then, don't worry about gettin fired," Shorty said. "Deckhands are so scarce they're thinkin of importing 'em from Arkansaw."

"Why Arkansaw?" I said.

"Well, they claim they didn't hear about the war yet down there and they say there is plenty of strong boys in the back country that would make deckhands."

"Did you ever hear that radio station they got down at Blytheville?" the other deckhand said.

"No, I never heard it," Shorty said.

"They just play and sing and yodel all the time. They don't have nothing else on the programs. Mostly yodeling and blues."

"My old man used to know Jimmy Rodgers," I said. Right away I remembered what Joe had told me and I knew I should never have said that.

The other deckhand decided the time had come to notice that I was here. "You say your old man knew Jimmy Rodgers?"

"Yeah," I said. "He met him once down in Memphis."

"Can your old man sing blues and yodel?"

"No," I said. "My old man's in the whiskey and hootch business."

"Whiskey and hootch? My lands," Shorty said.

"Now what do you call those cables there?" I said.

"Them's the face wires. Never mind them. Do you get whiskey free when you're at home?" the other deckhand said.

"Why sure," I said. "And what do you call these cables here?"

"Them's the jockey wires," the other deckhand said. "My oh my, imagine an old man in the whiskey business."

"Don't he sell no wine?" Shorty said.

"Sure," I said. "Anything you want. Why do you call them the jockey wires?"

"I'm more partial to wine," Shorty said. "Elderberry wine to my mind is about as good a drink as you'll find."

"How come they call these here the jockey wires?" I said.

"Why man, because that's their *name*, that's why," Shorty said. "Elderberry wine is mostly homemade, though. I don't suppose your old man handles it."

Well, there I was. Joe had told me not an hour before to keep my mouth shut but of course I had to blow off about Papa and Jimmy Rodgers. It was not having any bad results, though. They both seemed to think that I was a little less useless right away.

"Another thing," I said. "What's this 'jack-knifing' I hear you talking about?"

"Why that's when we bust up the barges and nest them up to lock through. You'll see it soon enough, right up at Saverton lock."

"I think I better learn to splice. We seem to bust a lot of ropes."

"Lines, man, *lines*. We ain't got no ropes aboard," Shorty said.

"Well, we ain't doing nothing much," the other deckhand said. "Come on down in the hole, you, and I'll show you an eye splice."

I figured I was getting along all right.

It was a long trip to St. Paul all the same. I was pretty well worn out and had a smashed-up foot and a couple of mashed fingers. But I thought I would be all right after I could learn to sleep. We worked six hours on and six hours off, week after week. By the time you made the sack and got to sleep you had lost nearly an hour. To eat and make watch time you lost half an hour. That meant that the most sleep you could ever get at one time was four and a half or five hours.

Joe took me uptown in St. Paul while we were waiting for empties. His girl was Irene and she got me a girl and we went out. My girl's name was Merle. I was surprised she was so good-looking. But I was so beat up I didn't realize she was actually beautiful until I got to thinking about it later.

"How about a drink?" I said.

"I don't mind," she said.

"Whiskey?" I said.

"Whiskey and sour."

"Want to dance?"

"I s'pose so."

"This your home town?"

"Uh uh."

"Where do you come from?"

"Eveleth."

"That's up in the iron range."

"Uh huh."

"What your folks do up there?"

"My dad's in the mine."

"How come you came to St. Paul?"

"Didn't like it in the sticks."

"Honey, I don't blame you. I hate the sticks too."

"Where d'you get that 'honey' stuff?"

"Want a cigarette?"

"I don't mind."

Well, that went on until around midnight when we took the girls home. We all did a little high school style loving and then Joe and I went back to the boat much refreshed.

That was my first trip to St. Paul on the *Inland Coal* with Joe. At first I stayed out of stubbornness. Then I began to forget I had ever lived any other way. Then I began to feel sorry for the people on the bank. When I got that far I was a river man.

3

WE WERE tied up next to a rocky bank in Alton and up at the top of the bank was our grocery order, over a 900-dollar order to load.

"Look at all those spuds," I said.

"I'll carry the corn flakes," Shorty said.

"Chewing it over ain't going to make it, boys.

Let's get started." Joe picked up a sack of flour and a case of Carnation and we commenced carrying our food aboard, down the rocks and up the plank, and along the starboard guard, to the galley on the stern.

Captain came out on the bridge beside the pilot-house and leaned over the rail. "What's the matter with the big Second Mate tonight?" he hollered down. "Joe, you look all beat out."

"You tell 'em, I stutter, Cap," Joe said, coming down the bank with a quarter of beef.

"Why don't you take after Bill there, Joe? Now Bill he wouldn't go to work and drink whiskey and smell around none of them town girls, would you, Bill?"

"God forbid, Cap," I said.

"Now take Diamond. He slept all afternoon and is just ararin to go, ain't you, Diamond?" Diamond was the other deckhand, the one who had showed me how to splice.

"Yes sir, you bet." He never went uptown, said he didn't care to go up and fool his money away and would one of us bring him a carton of Marvels. He was saving to buy some chickens or some such project and there were always copies of the *Poultry Journal* in his bunk with articles on how to make Buff Orpingtons squirt eggs like a machine gun.

We went on down the guard and Diamond said to me, "Sure, I had a dandy sleep, with them engineers swatting the engines with 20-pound sledge hammers and bouncing 48-inch Stillson wrenches offn them steel decks. Sure, I had a dandy sleep." He dropped a case of Karo, picked it up again, and it commenced to drip. "That's right, go ahead and leak," he said.

Diamond was the well-dressed deckhand. He parted his rather greasy, silent-movie style hair carefully in the middle, and his jeans were always clean. His toes never stuck out of his socks because he did his own darning. He worked just as hard but he never seemed to get all smeared up with grease, coal dust, and red lead like the rest of us. He was about my height (they call me "average"), and he had an expressionless face that you couldn't remember when you got to thinking about him later on. Diamond seemed to have a master plan all set up and covering his whole life, whereas the rest of us had no plans extending any farther into the future than supper time.

It was a little bit heavy loading the stores, especially the sacks of potatoes, but on the other hand the smells that went with this job were all home smells, not steamboat smells. The smell of the cases made you think at once of the grocery store you went to as a kid with a penny for one of those wax bottles with red syrup in them.

"Oh, you morphadite," Joe said as the end of a case he was carrying gave way and cans of peas commenced to drop to the deck and roll around. One rolled off into the river, *plunk!*

Now evening was coming. Captain couldn't think of any more funny remarks. "Leave me know when you're ready to get at them loads," he hollered down to Joe, and went into the pilothouse and started to read *Real Detective*.

We went on loading. The sun was well down over in Missouri; we were working slow and steady and enjoying ourselves, and feeling the whiskey coming out in our hair. A breeze was coming up, a very light breeze from down below, and the nighthawks were beginning to show up, peeping, swooping, and climbing for those sensational power dives. The last blast of the sun was on the very top of the bluff above us. I suddenly realized that I could do this forever, that I didn't necessarily have to go back to the gray flannels and cordovan shoes. It was a nice thought for sundown.

4

I WENT out and walked up the guard on the river side of the boat.

"What's the matter, Bill? You look kinda sad," Joe said when I got back on the foredeck again.

"Feeling sorry for myself, Joe. Guess I got a hangover," I said, lighting a cigarette.

Joe sat on the double bitts and rolled a cigarette out of Duke's Mixture. Diamond sat on the bottom step of the starboard tow knee and looked neutral. Shorty was getting into a life jacket to start making up tow.

"I wonder what the stockholders are doing tonight," Joe said.

"Eating cold lobster, every last one of them," I said.

"What's that?" Shorty said.

"Kind of like channel cat only more on the order of wild rabbit," I said.

"My uncle he won't eat rabbit," Shorty said.

"No? Why not?" Joe asked, looking up at the evening sky.

"He don't like it."

"Say, that's quite an interesting story about your uncle," I said.

Shorty looked pleased. "He don't eat no tomatoes neither."

"Don't like them, neither, I suppose," Joe said, following a nighthawk with his eyes and waiting for him to dive.

"He claims they're poison," Shorty said. "My uncle says most of the people that dies dies from tomatoes and don't know it."

"Let's make up the tow," Diamond said, "and get it over."

"What's this uncle's name, anyways?" Joe said.

"Randolph, Jacob Randolph. I'm named after him. Down at Beardstown they all call me Randolph. Nobody calls me Shorty at home. They all call me Randolph. They always just call me Shorty out here on the boats."

Joe got up and put on his gauntlets.

"We ain't gonna cut it this way," Joe said. "We ain't making the Inland Barge Line no money setting here."

"That would just bust my heart if they didn't make no money offn us for ten minutes," Shorty said, getting up.

"Bill, you go out on the loads with these guys. I'll go up and interview Captain James E. Sargent what we're gonna do with them barges."

Shorty and Diamond and I trudged along the bank through the cinders and sandburs.

"Ouch! Oh, them useless burs," Shorty said, stopping to pick them off his blue random-mix socks.

About a hundred yards upstream our eight barges were tied off below the tippie, lying there very quiet and subdued, each loaded with nearly a thousand tons of Central Illinois coal. It was up to us to get behind this dead weight and shove it 640 miles upstream. But first we had to lace our fleet together with chains, cables, and screw ratchets until all eight barges were one solid, integrated, inseparable unit.

There were a couple of big 235-foot Federal barges against the bank, with our barges hanging outside them. We climbed up on the Federals and walked across the deck onto our loads. I looked over the rigging the other watch had left for us. Diamond and Shorty kicked idly at the rigging and argued. Sometimes I got sick of listening to it all. Their conversation and phrasing seemed overripe. I could see some eager student of Americana in a homespun tie and needing the clippers up the neck taking it all down with enthusiasm in a ring-binder notebook.

The river was running down on the outside of the barge fleet — cool in the evening shadows, with a little drift from out of the Illinois River — sticks, bottom-land trash, a split fence post, once in a while a bottle with the label washed off. A lot of that slowly passing river had made the trip down from the Twin Cities, too, and that set me to thinking of the new trip we were about to embark on, and of my steam-heated Cinderella at the end of the line. One afternoon or evening soon, we would creep back into St. Paul past the slaughterhouses, tie off our coal, and that evening I would find myself in an alley or on a rooftop with Merle biting my lower lip. Boys, she was beautiful and passionate and grownup. And love will rule the world.

"Why don't you guys abandon that comical minstrel show argument and help me straighten out this rigging?" I said.

Joe came across the deck of the Federal. "All right, boys, here's the way she looks," he said, concentrating and looking around him at the barges. "They got 108 and 111 all jockeyed up and ready to face up to. Now they got all our rigging right here for us, must of brought the boat alongside and

threw it off. First we make the coupling here between 111 and 16. That's 112 ahead of 16, and we got to yank her out and set her in here where 30 sets. We'll let 9 that's up on the head flop around on the outside of 30, hang the both of them on the head, and we got her made, slick as a Rock Island whore and twice as cheap. Run them ratchets out, boys. St. Paul here we come."

Making tow can be easy if you have a good mate and a crew working together, or it can be all sweat and hard feelings. Some mates get excited, start hollering at the deckhands, get things all balled up, cuss the pilot throughout the proceedings, and end up with a deckhand in the river, another one ashore to the doctor, and everybody sore. A mate that operates on this schedule can't keep his deckhands long enough for them to learn to work together and so no improvement is ever forthcoming and life aboard, instead of being a Little Bit o' Heaven, is more on the order of getting married and going to live with ma and pa so far as peace and harmony is concerned.

Shorty and Diamond and I had worked together long enough to know who wanted the ball for a shot without calling time out for a discussion. And Joe was a mate that made everything easy.

So we labored and it grew dark. Sargent helped us with the searchlight. After about forty minutes we had the barges all shuffled around and laced together with plow steel.

"Now, you bastards," Joe said, addressing the barges, "don't let me hear no more outa you until Keokuk lock."

"I believe we've got her," Diamond said.

"We've got her, Cap!" Joe hollered. "Let's go! Dropping back!"

"OK, Joe," Sargent called out. "Dropping back."

We stood on the forward deck as we dropped down to face up to the tow, taking a quick smoke. Then the boat snuggled her blunt bow and tow knees against the barges and we set the face wires. Diamond and I put our backs into the winches. We were facing up. The new trip was ready to begin.

"Leave her go, Cap," Joe hollered up at the pilot-house, and the Captain gave a single toot on the whistle to Shorty, who was out on the head of the tow 800 feet away. And pretty soon we could hear Shorty's voice echo down the coal piles: "A-L-L-L-G-O-N-E." We were off to the northland empire. No one saw us go, and there were no baskets of fruit or light novels from Brentano's on our bunks.

It was night and ahead of us the Mississippi River and the Illinois bluffs had disappeared. We were heading up into a black wall. Now it was up to Mr. Pilot.

"Let him sweat for a while," Diamond said.

It had been a long, long day.



JACK RUSSELL is a Canadian who, as the export manager for various automobile companies, put in fifteen years of strenuous, successful work in Europe. While in London, he fell in love with Jill Gilfillan of the London Ballet, but before they could be married his health failed, and under doctor's orders he retired to his camp in the Maine woods. He and Jill were married in 1927; his health was steadily improving, but the question was, Where, at the age of forty-eight, could he find a new lease on life? The article which follows is drawn from his book *Jill and I* — and the Salmon, published this summer.

JILL RUNS THE CAMP

by JACK RUSSELL

I

IN OUR courting days, as Jill and I occasionally walked through Green Park in London, I tried to arouse her interest in that camp of mine at Topsfield in northern Maine. I went into a glowing account of the deep woods, the quiet, unspoiled beauty of the lake, and how comfortable my bachelor quarters really were. But Jill was thinking about the ballet for which she was then rehearsing, and though she was polite, she didn't really pay much attention. "What is a camp?" she asked. "Do you sleep in a tent? I don't think I want any part of that."

The truth is that Jill had led a sheltered city life. She knew London, she knew Paris, she knew and loved the theater; but she simply couldn't imagine what it would be like to live in the rough. This came home to me even more in a talk I had with her mother when our engagement had been announced. "Don't you ever take my child out of a city," warned my mother-in-law to be. "If you do, she'll die."

We were married at Portsmouth, New Hampshire, on May 16, 1927, and after our honeymoon I brought her to my camp. It really was a comfortable one as fishing camps go, and to make things easier, we had a friendly caretaker in Ralph Thornton and a marvelous cook in his wife, Fanny. But this, understand, was Jill's first introduction to the woods. She had to learn not to use her London manners towards the lumbermen and guides who occasionally drifted our way; she had to put up with the insects which are an inescapable part of camp life; and of course I was eager for her to share my love of fishing. It was a time of adjustment for us both.

As my health came back I began to feel more restless than ever for a new job. I did part-time work in the campaign for Conservation which was then just beginning in Maine; I made occasional

trips across the border into New Brunswick, and on one of these my friends brought me to an incredibly lovely camp site on the bank of the Southwest Miramichi. Here, where the famous old covered bridge spans the river, was the Porter Cove Pool, over a hundred yards in width and, as far as I could judge, a natural resting place for the fish in high water and low.

When I drove Jill up to see it she was just as excited at the prospect as I was. And in no time we were projecting the kind of camp we might build there. But it took me a year to arrange for the property along the high riverbank and to secure a ten-year lease of the pools above and below the camp site — three miles of river in all. At first we planned simply for a single cabin big enough for ourselves and a friend or two, but the Depression hit in the first autumn of our building and the venture took on a much more practical aspect. Now we were building because in a way our livelihood depended upon it; now we were building a place which we hoped would attract the pick of American anglers, who would come to us at a reasonable price. We planned to open for business in May of 1930.

Never shall I forget how hard we worked. Jill was just as intent on the building as I was and she certainly was a novelty in the neighborhood. She wore heavy underwear, ski pants, a flannel shirt, a Hudson's Bay coat, mittens which she knitted herself, a fur cap, and lumbermen's rubbers with big thick socks. It was an eminently practical costume except for one thing. Ski pants on women were just next door to immorality in the Miramichi country. I remember when an octogenarian (by the name of John Hovey) stopped by to see how things were going. I was pointed out to him as the newcomer from the "Outside." He stood watching operations

for a bit and then asked one of my men, "Who the hell is that boy following Russell around?"

That spring was one of the most memorable ones of my life. The walls of the Main Camp were going up fast. The log drive in the river was in full progress, the telephone was being installed, the electric light plant was on its way; in a fit of anger I fired the foreman carpenter for not being quick enough. Then, when the tempo was at its height, Jill quietly told me that she was expecting a baby.

Somehow the news got around and I couldn't help smiling when, a few days after Jill's announcement to me, I found myself being congratulated on the coming event by Bert Pond, whom we had just hired as a guide. Bert remarked that there were two other women in the neighborhood, one of them his wife, who were also expecting at about the same time as Jill, and then he added, "Must be a microbe loose on the river."

Jill was not yet up to cooking for us, so we took our meals with Stella Pond, whose house was half a mile up the road from our camp and whose food we liked so much that we asked her to cook for us when the guests arrived. But there were times during the building when I had to ask Jill to fix up some lunch for the gang. She was perfectly willing, but the first time (we then had five men on the job) I must have felt some apprehension, for I absented myself from the scene. I got the story later.

It appears that when lunch was finally announced the men quit work and went to clean up. The first man to reach the table found five potatoes in the vegetable dish and helped himself to all of them, together with a liberal portion of the fried veal, which Jill admitted afterwards was as crisp as old leather. He tried the veal gingerly, then wolfed down all the potatoes.

I heard of this when a hungry-looking man came to find me. "Didn't your woman cook any potatoes for us?" he asked.

"Why, I am sure she did," and I went back to make sure.

Jill was indignant at my question. "Of course I cooked the potatoes!" she explained. "I cooked five of them, one for each man!"

We opened house on the sixth of May. The first to sign our register were Thomas F. Magner, the ex-Congressman from New York, and his friend Robert Brown from Brooklyn. They hit into very good fishing from the first day, which was fortunate for all concerned since it made them oblivious of the fact that shingles were still being hammered on the roof as they took their meals. No big deal in the automotive business ever had me more on my toes than the arrival of these, our first two guests. Were they going to be satisfied with the accommodations? Would they like our meals? Would the fishing live up to their expectations?

Our first summer passed on the heels of time. Guests came and went; Jill became more and more

the supervisor of the Main Camp and kitchen. I had chosen with a good deal of care a group of a dozen guides, and even in this first season they were working together with enthusiasm and harmony. In the autumn as we looked back on that new register, which numbered eighty-four guests, we realized that our venture had been well launched.

We both needed this reassurance; all the year past we had been paying out — building, hiring, investing in boats and equipment — and we had barely enough money to ride us over the winter, which I knew would be doubly expensive with Jill's confinement. Our son Bill was born on November 25, the day before Thanksgiving.

2

IN MY concentration on the operation of the camp I am sure I never realized how much was expected of Jill. The open fire in our living room was the heart of the house. We would sit in the dark watching the firelight and discussing our plans for the next season. And by day Jill gave the room those deft woman's touches which no man would ever think of.

Because Jill is English she cannot live without flowers. As soon as the Main Camp was finished she began looking for a likely spot for her flower garden. She chose first a thin strip of soil running along the top of the bank, opposite the front door. Here she planted a bed of pansies, but they didn't last very long because every guide and his fisherman seemed to have to tramp over that exact spot as they went down the bank to the landing. Jill's effort to protect the bed by safeguarding it with a rim of small rocks also met with defeat, for when the fishing was slack the men used to compete with each other in throwing the rocks across the river. So Project No. 1 was abandoned.

Her next try was by the side of the house under the dining-room windows and toward the southwest sun. Here she planted hollyhocks, petunias, sweet William, and a border of portulaca. The garden flourished in this spot until, with rather dramatic suddenness, we discovered that our plan of pumping in water from the river did not work and a well had to be sunk in short order. I wanted to get the hole as close as possible to the house to save pipe, and Jill's flower bed happened to be the ideal spot. Curtains to Project No. 2!

But Jill had not the slightest intention of giving up. She simply moved her garden a little further away and persuaded Marshall, whom we had hired to take care of the camp the year round, to plow out a central circle of green in our circular turn-around. This was a larger plot, and for it she chose perennials: delphiniums, lupines, phlox, Michaelmas daisies, roses, forget-me-nots — a mass of color. This garden was the best of all, and the flowers broke all records. I don't think I have ever seen

such tall and lovely delphiniums, which grow particularly well in our northern climate. Here Jill planted and cut unmolested for at least three summers. Then it occurred to me that there, surely, was the perfect spot for a flagpole. So we cut one of our tall spruces, painted it white, and, with what was to us a minimum of destruction, sunk it at the front of the garden. Jill retaliated by covering up its base with a rock garden.

In our first season our guests and ourselves were restricted almost entirely to tinned vegetables since there were so few fresh vegetables available in this part of the country. Potatoes, carrots, turnips, and cucumbers were at that time the extent of the local crops, and we knew that our American guests would want more fresh vegetables than these. So Jill took on the planting and supervision of the vegetable garden downriver from the Main Camp.

Marshall was her lieutenant, plowman, and strong back. We don't do our planting on the Miramichi until June, but the growth is amazingly quick, and in its first year our garden produced for the table lettuce, radishes, peas, beans, spinach, and beet greens by July; green tomatoes, young carrots, summer squash for August; and sweet corn for September. In the years to come that garden not only took care of our needs for the summer but, what was equally important, its canned vegetables went into our storeroom to feed us during the winter and the following spring.

So in addition to young Bill and her flowers, Jill had a major canning operation on her hands. It must have been a full day's work — how full I did not truly appreciate until I heard her remark, "It seems to me that we spend all summer getting ready for winter and all winter getting ready for summer."

For a girl who had been trained for the theater, I must say that Jill adapted herself to the backwoods and river life with a minimum of pain. She listened to talk of fishing from morning to night; she ate fish, she admired them; she weighed fish, she shipped fish; and in gusty weather she consoled with those who couldn't catch them.

Our good friend H. T. Webster, the cartoonist, once asked her how she managed to put up with all this fishing. Her answer was, "Sometimes I feel as if I had fish scales all over me." Webbie felt a sudden pang of sympathy, and this he showed in his characteristic fashion when, a few days later, he drew Jill aside and said, "Jill, some evening when you're not too busy, do let's get together and have a good long talk about fishing."

3

OUR second son, Jackie, was born in May, 1933. It was a most inconvenient time for him to come, for Jill wanted to give her undivided attention to the camp, where the early sportsmen had been fishing since mid-April.

When Jill came back from the hospital the entire camp — guides, cooks, Marshall, Billy Price, and the guests — turned out en masse to greet her. They were all curious to see the new baby. Buddy, our German shepherd, was wild with delight to have Jill back, and we were relieved to see that he was no more jealous of Jackie than he had been of Bill.

When I was away from camp, Buddy took my place as Jill's protector. He took his position on the back porch right in front of the kitchen door where he could watch and hear everything that went on. Here he slept all through the summer, and it was always a mystery to me how he could distinguish the guests from a stranger. They might come back in their cars late in the evening, and Buddy would make no comment; but let a fish warden approach, gliding through the night in his shadowy canoe on the lookout for poachers, and Buddy's ruff would go up and Jill would hear him growl. We had arranged to let the fish wardens sleep in our guides' camp, but they were never permitted to step out of the canoe on the landing until Jill or Marshall had called him off. Jill would say, "It's all right, Buddy," and back he would go to the porch.

By mid-June Jill's strength had returned, and it gave me a comfortable feeling to know that she was at the helm. It was a big job that she did steering the home camp, but no matter how her responsibilities doubled, she always seemed equal to them and imperturbable.

She was now in full charge of the camp. As the hostess her first responsibility was to the guests: the river trips, of which there might be as many as eight a month, were fussy things to arrange; the supplies for each — and it might be a big party — had to be checked and rechecked before they were packed. In the nursery she had two boys under three years; she was supervising the ever expanding vegetable garden; she was keeping the books after her own fashion; and, as if this were not enough, she now accepted the guardianship of a dozen mangy chickens. A friend who was leaving the country asked Jill to care for them in her absence. She never came back. So here they remained, the nucleus of Jill's brood. Our guests, who liked to tie their own flies, kept plucking their feathers, so their looks were never repaired. When Jill visited the Stanley Fair the following summer she couldn't resist the sight of some healthy-looking pullets. We brought sixty of them back with us, and this in turn meant that the hencoop had to be rebuilt and that a fox-wire fence had to be built around the chicken yard.

This was the illogical process that brought to us our fresh eggs and chickens, but I must add that Jill was too tenderhearted to be a really rugged chicken farmer. Each of the original mangy dozen had been christened, and long after Eliza and Molly had ceased to lay eggs, they were allowed to hobble about because Jill couldn't bring herself to have them killed.

To help her, Jill had as loyal and competent a staff as could be found in the North country. In the kitchen Stella had been succeeded by young Isabelle, who by this time had blossomed into a full-blown cook. We were still using the small family range we had begun with, but on that range Isabelle would be cooking for as many as twenty-nine people. Isabelle made all our bread and pastries, and it took wonderful timing and planning to arrange the baking in the small oven. The pots and pans hung from the center rafter — shining and convenient. We had an outdoor grill where we broiled our fish and steaks, and this all came under Isabelle's supervision. She had the most remarkable memory about the likes and dislikes of each guest: this elderly angler liked to have a glass of hot water with his breakfast; this perfectionist wanted his new-caught salmon served kedgeree; another favored dandelion greens prepared in his own special way; and in the spring one and all enjoyed the boiled fiddleheads which we gathered close to the river.

And her good nature was inexhaustible. I remember one Saturday when we had thirteen guests departing after lunch and fourteen guests coming in that afternoon. But as it happened they drove in the dooryard just as the outgoing guests were saying good-by. We expected to feed the new arrivals at dinner and not before. As we greeted them it developed that they had had no lunch. Jill in dismay went in to see Isabelle. The luncheon dishes had been cleared up and Isabelle and the waitresses were ready for their afternoon rest. But Isabelle read Jill's mind. "I know what it is," she said. "They haven't had lunch. Let 'em come. That's what we are here for." And there was a delicious hot lunch on the table for the new arrivals in short order.

Here were the dishes with which Isabelle made her reputation: First, her salmon chowder, which became the *pièce de résistance* of our camp; then her graham bread, mounds of which would vanish from the plates; a cookie she created and which we nicknamed "Miramichi Rocks"; her steamed brown bread and baked beans; her chowchow pickle and watermelon pickle; and her pies, which were the tops. She did all the famous ones — blueberry, apple, pumpkin, rhubarb, lemon meringue — and on one well-remembered occasion when Jill had gone to town and had forgotten to give her the lemons, she devised a lime pie which made a hit with everyone. When Jill asked her how she made it, Isabelle said, "Oh, I just made it up out of my head. You left me without lemons, so I had to use lime Jello instead." And what a pie that was — and is today.

I suppose the greatest compliment was bestowed on her by the chauffeur of a wealthy Boston visitor who had been with us a few days. The chauffeur had been eating with the help. When he said

good-by to Isabelle, he pressed some money into her hand with the remark, "Isabelle, you've given me the best meals here I have ever had. You know, a fellow gets sick of eating the leavings of à la this and à la that."

Bill in his third year began to show his independence and that love of the river which is deep in his character. He knew no fear of the water and he wanted to emulate the guides. One day when Jill was occupied with the baby, Bill decided to launch forth on his own. Several fishing parties were upriver, so there was only one canoe at the landing. In it Bill took his stand. He untied the painter. Jill, warned by the unusual silence, went to see what he was up to. She couldn't find him in the dooryard, and then with a tug of alarm she turned toward the river. To her horror what she saw was Bill's little figure standing in the canoe, pole in hand, drifting downstream. He was already two hundred yards on his way toward the rapids at Crudens Pool. It was too far for her to swim and, besides, the canoe was going too rapidly. Jill ran, calling to Isabelle. There wasn't a guide in the guides' camp, and Marshall was away haying. For a frantic moment she was panicky. Isabelle sped out the camp yard, calling at the top of her voice. Fortunately Jack Hovey and one of the Mackays were coming down the road. She screamed to them, "Bill's on the river alone!!!" and they came on the run.

They had a canoe on the water in less time than it takes to tell, and paddled furiously after Bill. They caught up with him after he had turned a bend and was out of sight down the river. When he was lost from view Jill was beside herself, for she couldn't tell what had happened — whether he had been tossed by the rapids or had already fallen overboard. Imagine her relief when at last around the bend came the two canoes, the guides poling, and a little figure sitting erect in the first. As she told me later, Bill was so proud of himself that her anger fizzled out. The confidence which little Bill acquired that day I firmly believe has stayed with him straight through life.

I cannot remember exactly how old Bill was when he started to try to cast, but I do remember that our guests used to laugh when they saw him swinging a two-handed salmon rod in the dooryard, where we do a lot of practice casting. I had Marshall keep the grass well mowed right back of the guest camps, and it was an ideal layout for casting with a salmon line on. Bill's first fish, which he netted in the spring after his fourth birthday, was a sizable trout. His casting left a lot to be desired, yet he hooked a fish weighing well over a pound, and that instant a new fisherman was born. Bill dashed in to see his mother with the fish in his hand, and Jill's remark was priceless. "Now," she said, "we have another fisherman to listen to."



THE FANCY

(With a bow to George Borrow's *Lavengro*)

THE bruisers of England, the men of tremendous renown,
The choice of the Fancy who tooled through the dust from the Town
With peers in their chariots all hasting toward glory and fame,
And gigs and blood horses that raced till they came to the game —

Their times and their seasons, their glory, alas, that must pass
With the turf-treading masters, to fade like the flower of the grass!

Cribb, champion of England, the lion-faced, leading the van;
And Belcher the Younger, a most scientific man;
The savage, dark Shelton whose blow was a thunderbolt dealt,
The tiny and terrible Randall, the man-eating Celt —

The luck of the ring and the roaring of mass and of class
To the rush and the rally and shifting of feet on the grass!

Black Richmond; the Welshman; and Hudson the Bulldog, and Tom —
That tall Tom of Bedford, brown-eyed, of a thunderous calm,
That yeoman of Holborn, fit follower of Broughton and Brain
Whose portraits grinned down, in his pub, on the hubbub profane —

The clamor of backers in bars and the clinking of glass
At a name new to fame, soon to pass like a cloud from the grass!

Straight left and Long Melford; the battlers stripped down to the buff;
The blows of bare morleys, and neither to hollo enough;
The swells with their whiskers, their beavers aslant on the ear,
In greatcoat and hessians, to parley and wager and peer —

The cross and the counter, the feint and the grunt and the thud;
The down's sun and shadow; the challenger first drawing blood!

The days of the Fancy! A turbulent tale and a dream
That feats of fair field and no favor are fain to redeem
In old colored prints; the profession that Borrow extolled
As though he were Homer invoking the heroes of old —

Their life in his language; his memory never to pass
Though faded their glory as fadeth the flower of the grass!

WILLIAM ROSE BENÉT



The Atlantic Serial



"One gets a certain thrill from discovering something others had not known," Orville Wright remarked to FRED C. KELLY, then working on his biography of the Wright brothers. After Orville's death, the family gave Mr. Kelly exclusive access to the Wright letters now in the Library of Congress. "I think," he writes us, "that they are the most important unpublished letters now available anywhere in the world. They deal with a subject that has brought a greater effect on the world than anything since the discovery of America." The Atlantic is pleased to publish excerpts from the letters, annotated by Mr. Kelly. This is the last of three installments.

MIRACLE AT KITTY HAWK

Unpublished Letters of the Wright Brothers

Edited by FRED C. KELLY

8

AFTER the trials at Kitty Hawk of their 1902 glider, designed with knowledge gained from their wind-tunnel experiments, the Wrights felt sure they could fly a power machine. There were delays in getting the new machine ready, partly because they had to build their own engine, since none that they could buy seemed suitable. Another problem was propellers. The brothers had assumed that they could learn all they needed about the theory of propellers from books on marine engineering, and then substitute air pressures for water pressures. But when they began to read such books, they discovered that, though screw propellers had been in use for a century, surprisingly little was known about them.

A majority of the earlier letters from the Wrights were written by Wilbur, for a reason given in the letter that follows. But Orville could express himself equally well. For a time many letters went to George Spratt, a young man in Pennsylvania, much interested in aeronautical problems, who had visited the Wrights at Kitty Hawk.

ORVILLE WRIGHT TO GEORGE A. SPRATT

DAYTON, OHIO, June 7, 1903

While I am aware that the shock of receiving a letter from me is apt to bring on a fit, yet I assure you that my writing is with no "design" on your life, which you mention in your letter to Wilbur.

We both take great interest in your letters, and my not writing to you is not from a lack of interest in what you are doing, but rather from a lack of ability as a letter writer. Will seems to enjoy writing, so I leave all the literary part of our work to him. But I see that he has failed to make you understand exactly what our ideas are on some of the points that have been under discussion.

[The next part of the letter was devoted to a highly technical discussion of air pressures.]

I will drop the argumentative a while to tell you of what has been going on since we last met in Kitty Hawk. Immediately after our return we began the construction of a new testing apparatus for measuring the effects of wind at various angles on surfaces. After almost completing the machine, we discovered that we would have to have a very large room in which to operate it, as the current in our tunnel would be stronger on one side and then on the other, according to the course taken by the air in returning to our fan. Consequently we were compelled to lay the whole matter aside until we are able to find a more favorable place for operating. We may take it to Kitty Hawk.

We next began the designing of ribs, spars, etc., for our next machine, on which we had decided to put a motor with propellers. We had already before leaving Kitty Hawk about decided on many of the points of construction, but it takes considerable

figuring to determine the proper sizes of the different parts so as to maintain a high enough factor of safety in so large a machine.

We are going to make the surfaces 40 x 6½ feet, about 6 feet apart. . . .

Our curvature of surface will be about one in twenty, probably not as easy in control as the shape used last year, but of better lifting capacity. We are greatly increasing the size of the front rudder so as to have an abundance of control anyway. About Christmas time we began the construction of the motor, which is of four cylinders, 4-inch bore and 4-inch stroke. We had estimated that we would require a little over 8 horsepower to carry our weight of 625 pounds of machine and man. Our motor on completion turned out a very pleasant surprise. Instead of the 8 horsepower, for which we hoped but hardly expected, it has given us 13 horsepower on the brake, with a weight of only 150 pounds in the motor. During the time the engine was building we were engaged in some very heated discussions on the principles of screw propellers. We had been unable to find anything of value in any of the works to which we had access, so that we worked out a theory of our own on the subject, and soon discovered, as we usually do, that all the propellers built heretofore are *all wrong*, and then built a pair of propellers 8½ feet in diameter, based on our theory, which are *all right!* (till we have a chance to test them down at Kitty Hawk and find out differently). Isn't it astonishing that all these secrets have been preserved for so many years just so that we could discover them!! Well, our propellers are so different from any that have been used before that they will have to either be a good deal better or a good deal worse.

We have also made some experiments on the best shapes for the uprights of our machine, and again found out that everybody but ourselves is very badly mistaken!!! We simply tested the shapes here illustrated for the purpose of finding which was the best; exact measurements or ratios of resistance in the various shapes were not made, and the figures I give are only approximations. The "fair" or fish shape, like that recommended by Mr. Chanute, did not give as good results as that of the piece with the corners simply rounded. Mr. Chanute seems to very seriously doubt the accuracy of our measurements, as do some others who have made measurements along the same line. We are building our new uprights with simply rounded corners, nevertheless. We are going to have the chance to learn a whole lot of things when we get to Kitty Hawk this year, maybe very much to our sorrow. By the way, I will state that you will receive an invitation as soon as we determine our time of going, to visit us again at camp. . . .

The theories you advance on the effects of straight winds on curved surfaces, and of curved winds on straight surfaces or planes, seem very

original and interesting. I hope that you will have more time to carry on your experiments, and to develop these ideas to their fullest extent. You doubtless will make some mistakes, just as we do, and just as everybody else does, but if we all worked on the assumption that what is accepted as true is really true, there would be little hope of advance. . . .

P.S. Please do not mention the fact of our building a power machine to anybody. The newspapers would take great delight in following us in order to record our *troubles*.

Almost as important as their research on wing curvatures and their method of control was the Wrights' work on propellers. They were the first to be able to calculate accurately in advance a screw propeller's performance.

WILBUR WRIGHT TO OCTAVE CHANUTE

DAYTON, June 18, 1903

The papers on screws [propellers], by various writers, do not seem to me of very much value. The chapter in the French book of André which is devoted to screws seems about as good as anything, but the final conclusion is that very little is known of the action of screws in motion forward. The action of screws not moving forward presents a very different case, and experiments based on such conditions are not applicable to the conditions met in practical flying. . . . Some of the writers see that running forward introduces new conditions but they do not seem to have any very definite ideas as to the amount and nature of the differences. We think we have a method of figuring a screw in action but of course it is all mere theory as yet. We will know more about its correctness when we have had a chance to try it.

At Kitty Hawk, when Spratt was the Wrights' guest, they had many arguments and discussions about technical questions, and some of these arguments were continued in letters.

ORVILLE WRIGHT TO GEORGE A. SPRATT

DAYTON, June 28, 1903

Your letter of the 12th was received some days ago, and has been read over a number of times by Wilbur and myself. Your speaking of knocking the props out from under us and allowing us to come up to your way of thinking reminds me of a new flying machine which Mr. Chanute saw in Europe. It was built to run along on some long legs or stilts until it has attained a pretty good speed, when it kicks its own legs out from under itself and allows itself to rise. However, I guess our props are stuck pretty well down into the mud, for we do not feel them giving under us much.

We made up several styles of ribs before adopting our present method of making them, but found

nothing more satisfactory than the one I described to you. Those with holes bored in them, like you mentioned, we found to be heavier for the same strength. We wrap the ribs at all places where blocks are put in with glued paper, which adds greatly to the strength. Since putting in heavier springs to actuate the valves on our engine we have increased its power to nearly 16 horsepower, and at the same time reduced the amount of gasoline consumed per hour to about one half of what it was before.

You were inquiring, some time ago, about Langley's *Experiments in Aerodynamics*. We do not think it would pay you to buy this. In fact, we place very little confidence in the work. Lilienthal's *Der Vogelflug*, Chanute's *Progress in Flying Machines*, and the *Aeronautical Annals* of 1896 and 1897 contain most of what has been published that is of much value. . . .

We cannot tell with any certainty yet as to when we will be ready to go to Kitty Hawk, but we are hoping to be off about the middle of August. The motor greatly complicates the difficulties of building. We find it no easy matter to convey 16 horsepower from the motor to the two propellers. A French army officer has been very anxious to visit us at Kitty Hawk this year, but knowing that we will have much more work this year than heretofore, we do not feel that we ought to try any new visitors. We are collecting a whole lot of material for argument in camp, and hope to give you a good time when you meet us there.

9

LETTERS began to come to the Wrights from Captain Louis F. Ferber of the French Army, who had made gliding experiments as a hobby while serving in an Alpine artillery corps. As early as 1901 he had written to Octave Chanute about the Wrights, after reading of their experiments. He called himself a disciple of the Wrights.

WILBUR WRIGHT TO OCTAVE CHANUTE

DAYTON, July 2, 1903

What you have written to Captain Ferber will probably be a sufficient hint that for the present we would prefer to carry on our experiments undisturbed.

The method we employ in securing lateral equilibrium is of a somewhat complex nature, and unless a very minute description of the structure and theory of operation is given, there is danger to novices in attempting to use it. Both Orville and myself had trouble in our early experiments last year and it is our belief that beginners will be much safer on a machine without tail, and with the lateral balance secured by slightly shifting weight just as in our 1900 and 1901 machines. It is not our wish that any description of this feature of our machine

be given at present. Beginners should be cautioned to use machines of less than 20-foot spread from tip to tip, and to learn the longitudinal control thoroughly before attempting to use large machines and complex methods of operation. One thing at a time is the safe rule. . . .

Professor Langley seems to be having rather more than his fair share of trouble just now with pestiferous reporters and wind storms. But as the mosquitoes are reported to be very bad along the banks where the reporters are encamped he has some consolation. It would be interesting to attempt a computation of the possible performance of his machine in advance of its trial, but the data of the machine as given in the newspapers are so evidently erroneous that it seems hopeless to attempt it. It is a sure thing that the speed will not be from 60 to 90 miles an hour with an expenditure of 25 horsepower as the papers have reported its prospective flight. I presume that you are to be one of the guests of honor at the launching festivities. Our invitation has not yet arrived.

WILBUR WRIGHT TO OCTAVE CHANUTE

DAYTON, July 24, 1903

Your special delivery letter of 23rd inst. is at hand and I hasten to reply.

The vertical tail is operated by wires leading to the wires which connect with the wing tips. Thus the movement of the wing tips operates the rudder. This statement is not for publication, but merely to correct the misapprehension in your own mind. As the laws of France and Germany provide that patents will be held invalid if the matter claimed has been publicly printed we prefer to exercise reasonable caution about the details of our machine until the question of patents is settled. I only see three methods of dealing with this matter: (1) Tell the truth. (2) Tell nothing specific. (3) Tell something not true. I really cannot advise either the first or the third course.

WILBUR WRIGHT TO OCTAVE CHANUTE

DAYTON, August 2, 1903

Your letters of 27th, 28th ult. are at hand. We thank you for striking out of your "Revue" article the sentence relating to steering. You have, however, entirely mistaken the ground of our objection to it. The trouble was not that it gave away our secrets, but that it attributed to us ancient methods which we do not use. We could not propose a substitute without going into matters we think it safest to keep out of print for the present. But for the fact that the article was submitted to us in advance of publication and might therefore be considered as approved by us, I should not have considered it necessary to mention any of the matters which I called attention to.

Captain Ferber need have no fears that we are offended at his patriotism. If we had facilities for

entertaining him, and nothing but gliding on the program, and four months instead of less than two in our season, he would have been very welcome.

10

Not until September 23, 1903, were the Wrights ready for their trip back to Kitty Hawk. They made good connections with a boat and arrived at Kitty Hawk two days after leaving home. Discussing en route what they hoped to accomplish, neither had the slightest doubt about flying their new power machine.

ORVILLE WRIGHT TO HIS SISTER

KITTY HAWK, N.C., October 4, 1903

These two days of gliding have made us much more expert in handling the machine, and on the next day we have 18 to 20 miles of wind we expect to go up and stay up for at least several minutes. . . .

We haven't had but one newspaper since we came down here, so you see we are living in blissful ignorance. . . .

I bought this paper and envelopes in Norfolk as we came down. The young lady in the store recognized me at once as of the aristocracy, and so palmed off these envelopes without gum. As I will have to spend the next half hour heating up some tire cement to seal it I will have to close now.

WILBUR WRIGHT TO HIS FATHER

KITTY HAWK, October 4, 1903

We have increased our time for length of flight [with glider] to 43 seconds, which is $1\frac{2}{3}$ over last year's record and about three times the best of any one else. We will soon have it up to more than a minute as we are now able to remain practically stationary when a suitable wind blows up a good slope. This is something former experimenters were entirely unable to accomplish.

WILBUR WRIGHT TO OCTAVE CHANUTE

KITTY HAWK, October 16, 1903

We regret to learn that there is danger of your being unable to visit our camp this year. We are expecting the most interesting results of any of our seasons of experiments, and are sure that, barring exasperating little accidents or some mishap, we will have done something before we break camp. . . .

I see that Langley has had his fling, and failed. It seems to be our turn to throw now, and I wonder what our luck will be.

Langley made one more attempt to fly his machine, but again was unsuccessful. Not until several years later, when the Langley machine was completely rebuilt, with vital changes based on discoveries by the Wrights, was it able to lift itself into the air for a short hop.

ORVILLE WRIGHT TO HIS SISTER

KITTY HAWK, November 1, 1903

About a week ago the weather turned very cold (about zero according to my backbone) and another rain set in which continued for several days without intermittence. We found that a fire was absolutely necessary, especially on account of Spratt, who suffers much from cold. We took one of the carbide cans and, after punching some holes in the bottom for air, built a fire in it inside the building. Of course the smoke was so intense that there was no standing up in the room, so we sat down on the floor about the can with tears streaming down our cheeks enjoying its kindly rays of heat. Everything about the building was sooted up so thoroughly that for several days we couldn't sit down to eat without a whole lot of black soot dropping down in our plates. We decided a change was necessary, so we got a little stove pipe and built a stove out of the can, adding strap iron legs to it, and a number of patent dampers, so that now we have about as good control in our stove as we have on our machine. We are now living in luxurious ease.

Your asking that we telegraph after every storm would soon have us "busted" if complied with. We have been having an almost continuous succession of storms the past few weeks. . . .

I suppose you have read in the papers the account of the failure of Langley's big machine. He started from a point 60 feet in the air and landed 300 feet away, which is a drop of 1 foot for every 5 forward. We are able, from this same height, to make from 400 to 600 feet without any motor at all, so that I think his surfaces must be very inefficient. They found they had no control of the machine whatever, though the wind blew but 5 miles an hour at the time of the test. That is the point where we have a great advantage. We have been in the air hundreds and hundreds of times, and have pretty well worked out the problem of control. We find it much more difficult to manage the machine when trying to soar in one spot than when traveling rapidly forward. We expect no trouble from our big machine at all in this respect. Of course we are going to thoroughly test the control of it on the hills before attaching the motor. We are highly pleased with our progress so far this year. . . .

I have been putting in about an hour every night down here in studying German and am getting along pretty well.

ORVILLE WRIGHT TO HIS FATHER AND SISTER

KITTY HAWK, November 15, 1903

We are now alone again. The first time for about a month. . . .

Mr. Chanute says that no one before has ever tried to build a machine on such close margins as we have done to our calculations. He said that he nevertheless had more hope of our machine going than any of the others. He seems to think we are

pursued by a blind fate from which we are unable to escape. He has been trying to purchase the Ader machine built by the French government at an expense of \$100,000, which he was intending to have us fix up and *run* for him. He thinks we could do it! He doesn't seem to think our machines are so much superior as the manner in which we handle them. We are of just the reverse opinion.

ORVILLE WRIGHT TO HIS FATHER AND SISTER

KITTY HAWK, November 19, 1903

Mr. Chanute brought several pictures of the Langley machine which have furnished us matter for a good deal of speculation. It would appear from what Mr. Chanute learned in Washington that the machine weighed 750 pounds and had a 50-horse-power engine. The weight is about the same as ours but the power — four times as much. . . .

Judging from present prospects, it is probable that we will not be home before the first of next month. Of course we cannot tell what is going to happen when we try the engine and screws again, but if the propeller shafts stand up, I think the rest will. If we should succeed in making a flight, and telegraph, we will expect Lorin as our press agent (!) to notify the papers and the Associated Press. Chanute was much surprised that none of the reporters had learned of our experiments. Langley told him that they nearly worried him to death. Will thought that our best chance of doing the bird act would be to get home before Thanksgiving, but that now seems hopeless, so we will try it here.

WILBUR WRIGHT TO HIS FAMILY

KITTY HAWK, November 23, 1903

Our track for starting the machine (total cost about \$4) amused Mr. Chanute considerably, as Langley is said to have spent nearly \$50,000 on his starting device, which failed in the end to give a proper start he claims. At least this is the reason he gives for the failure last month. We have only tried ours with the little machine, so far, but it seems to work well.

11

NO ONE was more keenly interested in what the Wrights were doing than their chief mechanic, Charles Taylor, at their bicycle shop in Dayton. He had given them enthusiastic help in building their engine.

ORVILLE WRIGHT TO CHARLES TAYLOR

KITTY HAWK, November 23, 1903

We thought that when we could get both propellers on, the shock would be divided between the two, but on the contrary we found the shock greatly increased on each. The jerking of the propellers back and forth would loosen up the sprockets in spite of all the tightening we could do. . . .

We used a chain and a 6-foot 2 x 4 to tighten them and the nuts, but 10 seconds more run and they were loose again. We kept that up all Friday afternoon. . . . The next morning, thanks to Arnstein's hard cement, which will fix anything from a stop watch to a thrashing machine, we stuck those sprockets so tight I doubt whether they will ever come loose again. . . . When Mr. Chanute was here he said that from 25 to 30 per cent should be allowed for loss from transmission. As we had allowed but 10 to 15 per cent, we saw that the gears we have would not allow us to speed the engine up enough to get the thrust. However, the loss of transmission is not as much as we had calculated, or the power of the engine is more, for the propellers speeded up more than we had ever hoped for (standing still) but gave exactly the thrust we had calculated that it should give at this speed. We will not be ready for trial for several days yet on account of having decided on some changes in the machine. Unless something breaks in the meantime we feel confident of success.

WILBUR WRIGHT TO HIS FAMILY

KITTY HAWK, December 14, 1903

We gave machine first trial today with only partial success. The wind was only about 5 miles an hour, so we anticipated difficulty in getting speed enough on our short track (60 ft.) to lift. We took to the hill and after tossing for first whack, which I won, got ready for the start. The wind was a little to one side and the track was not exactly straight down hill, which caused the start to be more difficult than it would otherwise have been. However, the real trouble was an error in judgment in turning up too suddenly after leaving the track, and as the machine had barely speed enough for support already, this slowed it down so much that before I could correct the error, the machine began to come down, though turned up at a big angle.

Toward the end it began to speed up again but it was too late, and it struck the ground while moving a little to one side, due to wind and a rather bad start. A few sticks in the front rudder were broken, which will take a day or two to repair probably. It was a nice easy landing for the operator. The machinery all worked in entirely satisfactory manner, and seems reliable. The power is ample, and but for a trifling error due to lack of experience with this machine and this method of starting, the machine would undoubtedly have flown beautifully.

There is now no question of final success. The strength of the machine is all right, the trouble in the front rudder being easily remedied. We anticipate no further trouble in landings. Will probably have made another trial before you receive this unless weather is unfavorable.

On December 15, the day after the first try of the power machine, a little short of success, Orville Wright sent a telegram to his father: —

"Misjudgment at start reduced flight to hundred and twelve. Power and control ample. Rudder only injured. Success assured. Keep quiet."

FROM ORVILLE WRIGHT'S DIARY

THURSDAY, *December 17, 1903*

When we got up, a wind of between 20 and 25 miles was blowing from the north. We got the machine out early and put out the signal for the men at the station. Before we were quite ready, John T. Daniels, W. S. Dough, A. D. Etheridge, W. C. Brinkley of Manteo, and Johnny Moore of Nag's Head arrived. After running the engine and propellers a few minutes to get them in working order, I got on the machine at 10.35 for the first trial. The wind according to our anemometer at this time was blowing a little over 20 miles (corrected) 27 miles according to the Government anemometer at Kitty Hawk. On slipping the rope the machine started off increasing in speed to probably 7 or 8 miles. The machine lifted from the track just as it was entering on the fourth rail. Mr. Daniels took a picture just as it left the track.

I found the control of the front rudder quite difficult on account of its being balanced too near the center and thus had a tendency to turn itself when started so that the rudder was turned too far on one side and then too far on the other. As a result the machine would rise suddenly to about 10 feet and then as suddenly, on turning the rudder, dart for the ground. A sudden dart when out about 100 feet from the end of the track ended the flight. Time about 12 seconds (not known exactly as watch was not promptly stopped). The flight lever for throwing off the engine was broken, and the skid under the rudder cracked.

After repairs, at 20 minutes after 11 o'clock Will made the second trial. The course was about like mine, up and down but a little longer . . . over the ground though about the same in time. Distance not measured but about 175 feet. Wind speed not quite so strong.

With the aid of the station men present, we picked the machine up and carried it back to the starting ways. At about 20 minutes till 12 o'clock I made the third trial. When out about the same distance as Will's, I met with a strong gust from the left which raised the left wing and sidled the machine off to the right in a lively manner. I immediately turned the rudder to bring the machine down and then worked the end control. Much to our surprise, on reaching the ground the left wing struck first, showing the lateral control of this machine much more effective than on any of our former ones. At the time of its sidling it had raised to a height of probably 12 to 14 feet.

At just 12 o'clock Will started on the fourth and last trip. The machine started off with its ups and downs as it had before, but by the time he had gone three or four hundred feet he had it under much

better control, and was traveling on a fairly even course. It proceeded in this manner till it reached a small hummock out about 800 feet from the starting ways, when it began its pitching again and suddenly darted into the ground. The front rudder frame was badly broken up, but the main frame suffered none at all. The distance over the ground was 852 feet in 59 seconds. The engine turns was 1071, but this included several seconds while on the starting ways and probably about a half second after landing. The jar of landing had set the watch on the machine back, so that we have no exact record for the 1071 turns. Will took a picture of my third flight just before the gust struck the machine. The machine left the ways successfully at every trial, and the track was never caught by the truck as we had feared.

After removing the front rudder, we carried the machine back to camp. We set the machine down a few feet west of the building, and while standing about discussing the last flight, a sudden gust of wind struck the machine and started to turn it over. All rushed to stop it. Will, who was near the end, ran to the front, but too late to do any good. Mr. Daniels and myself seized spars at the rear, but to no purpose. The machine gradually turned over on us.

Mr. Daniels, having had no experience in handling a machine of this kind, hung on to it from the inside, and as a result he was knocked down and turned over and over with it as it went. His escape was miraculous, as he was in with the engine and chains. The engine legs were all broken off, the chain guides badly bent, a number of uprights and nearly all the rear ends of the ribs were broken. One spar only was broken.

WILBUR WRIGHT TO OCTAVE CHANUTE

KITTY HAWK, *December 28, 1903*

Our next flights were on Thursday, December 17, on which occasion the flights were all made from a level spot about 200 feet west of our buildings. The conditions were very unfavorable as we had a cold gusty north wind blowing almost a gale. Nevertheless, as we had set our minds on being home by Christmas, we determined to go ahead. . . . The "Junction Railroad" worked perfectly and a good start was obtained every time. The machine would run along the track about 40 feet propelled by the screws alone, as we did not feel it safe to have strangers touch the machine. It would then rise and fly directly against the wind at a speed of about 10 miles an hour. The first flight was of about 12 seconds duration and the last 59 seconds. The controlling mechanisms operated more powerfully than in our old machine, so that we nearly always turned the rudders more than was really necessary and thus kept up a somewhat undulating course, especially in the first flights. Under the prevailing conditions we did not feel it safe to rise far

from the ground and this was the cause of our flights being no longer than they were, for we did not have sufficient room to maneuver in such a gusty gale. Consequently we were frequently on the point of touching the ground and once scratched it deeply but rose again and continued the flight. Those who understand the real significance of the conditions under which we worked will be surprised rather at the length than the shortness of the flights made with an unfamiliar machine after less than one minute's practice. The machine possesses greater capacity of being controlled than any of our former machines.

One of the most gratifying features of the trials was the fact that all our calculations were shown to have worked out with absolute exactness so far as we can see, though we have not yet made our final computations on the performance of the machine.

ORVILLE WRIGHT TO GEORGE A. SPRATT

DAYTON, January 7, 1904

Your letter congratulating us on our success was awaiting us on our return from Kitty Hawk, and we had expected to write thanking you long before this, but have delayed writing till we could write more fully the particulars of our trials. We are receiving letters of congratulation from people, many of whom we do not know personally, but none please us so much as those from friends who are acquainted with our work and take a personal interest in it. . . .

That we had quite a surplus of power was shown by the fact that on leaving the rail we could rise 8 or 10 feet in going forward about 50 feet. Of course this really amounted to about 150 feet through the air. Our engine ran at 1030 revolutions to the minute, which is not much, if any, more than three fourths of its maximum power. Our machine complete weighed a few pounds over 600 pounds, which with the weight of the operator made the total weight a little over 745 pounds. The lengths of our flights were limited only by our lack of acquaintance with this particular machine. The front rudder was so much more effective than those on our former machines that we always turned it too far. As a result the first flights were composed of a series of undulations as were our first flights on our gliders. We were greatly pleased with the performance of the machine.

Since our return we have been receiving daily offers of stocking our company for us from some of these professional promoters, who would like to get the chance to swindle some of the people who think there is an immense fortune in the flying machine. Even our friend Herring has made us a very generous offer, a copy of which I am making for your

amusement. We have had requests from a great many of the better magazines and papers for accounts of our experiments, but for the present we desire to keep all the principles and details of our machine strictly secret, and for this reason have had to refuse them all. We are now starting the construction of several more of our engines, and hope to have another machine or two ready by early summer. We see nothing to prevent us, with a few minutes of practice, from making flights of considerable distances, though we are not saying this to everybody, as we do not like to blow too much about what we can do before we do it.

WILBUR WRIGHT TO OCTAVE CHANUTE

DAYTON, January 8, 1904

A copy is also enclosed of a letter received a few days ago from Mr. Herring. This time he surprised us. Before he left camp in 1902 we foresaw and predicted the object of his visit to Washington; we also felt certain that he was making a frenzied attempt to mount a motor on a copy of our 1902 glider and thus anticipate us, even before you told us of it last fall. But that he would have the effrontery to write us such a letter, after his other schemes of rascality had failed, was really a little more than we expected. We shall make no answer at all.

A. M. Herring had discovered that he had invented an airplane some time previously and wanted to join forces with the Wrights, taking a one-third interest!

Chanute replied that he was "amazed at the impudence of Mr. Herring."

WILBUR WRIGHT TO OCTAVE CHANUTE

DAYTON, October 5, 1904

I think I mentioned in a former letter that we had made two attempts to circumnavigate the field where our present experiments are being made, but that neither was successful. On the 20th of September we renewed the attempt and on the second trial succeeded. . . .

Up to the present we have been very fortunate in our relations with newspaper reporters, but intelligence of what we are doing is gradually spreading through the neighborhood and we are fearful that we will soon have to discontinue experiment. If your business will permit you to visit us this year it would be well to come within the next three weeks. As we have decided to keep our experiments strictly secret for the present we are becoming uneasy about continuing them much longer at our present location. In fact it is a question whether we are not ready to begin considering what we will do with our baby now that we have it.

(The End)

adventurers, men of singular penetration and force who established their authority in other countries — Clive in India, Gordon in China, T. E. Lawrence in Arabia, and Wingate in Burma. Brigadier Maclean and Colonel Chapman made their names in the last war and are here appraised by RICHARD E. DANIELSON, *editor and author, who served in our Military Intelligence in both wars.*

THE TRUE GLORY

by RICHARD E. DANIELSON

1

THOSE prophets of doom who go around selling the British Empire short might reconsider their position if they were to read these two books: *Escape to Adventure* by Fitzroy Maclean (Little, Brown, \$4.00) and *The Jungle Is Neutral* by F. Spencer Chapman, D.S.O. (W. W. Norton, \$3.75). Here are told the wartime experiences of two extraordinary young men, neither of them a professional soldier, which in standard of performance, in daring and stubborn fortitude, rival the adventures of T. E. Lawrence in World War I or the exploits of the great Elizabethan days. Indeed, there is in both books something of the Elizabethan spirit — an unflinching gallantry, an almost contemptuous refusal to be downhearted under appalling circumstances, and a spirit which sought danger rather than avoided it. One can be sure that Michael Drayton would have included these authors in that group of “gentlemen adventurers” of the Virginia Voyage whom he addressed as

You brave heroic minds
Worthy your country's name.

And it is in the same Elizabethan tradition that these men could not only carry out their immensely difficult and complex duties in strange lands with alien allies but were also competent afterwards to write their stories in vivid, forthright prose which few professional writers could surpass. Their styles are utterly different. Maclean is gay, witty, and trenchant. Chapman speaks always plainly and simply, sometimes with almost brutal understatement. When you have finished reading them, you realize that each has told his story flawlessly, that each has truly expressed himself in narrative — and this is a rare thing.

Brigadier Maclean's story is one in which a high degree of intelligence and all-round ability are devoted to the more exotic and exciting elements of modern warfare. A graduate of Eton and Cambridge, he entered the Foreign Service in 1933 at the age of twenty-two. Dissatisfied with the pleas-

ant life of the diplomatic set in Paris, where he was stationed, he applied for an appointment at Moscow, which was generally regarded as a diplomatic Purgatory. There, in characteristic fashion, he became fluent in Russian and spent his leaves in exploration of the Soviet hinterland. This was no easy task, and his lonely travels in Asiatic Russia were made in spite of the efforts of Soviet officials to arrest or detain him. The outbreak of war found him in the Foreign Office in London. He resigned to enter the armed forces but was told that his resignation would not be accepted.

A careful study of the Foreign Office regulations revealed that a resignation to enter politics had to be accepted, and on that basis he was released. Promptly enlisting as a private soldier in the Cameron Highlanders, a regiment which his father had commanded in World War I, he won a commission but was informed that the Foreign Office was inquiring about his political career. There was a by-election scheduled in Lancaster. He applied for the Conservative candidacy, was chosen, campaigned for the office, and was duly elected M.P. for Lancaster. Some time later he met Churchill in Egypt. “‘Here,’ he said, dragging me up to General Smuts, ‘is the young man who used the Mother of Parliaments as a public convenience.’”

Maclean did not stay long with his regiment. He must have been a marked man. Called to Cairo, he joined up with the Special Air Service, a group of parachutists which, along with the Long Range Desert Group, was assigned to sabotage raids behind Rommel's lines. This was a most dashing as it was a perilous and exhausting service, and one cannot help wondering how any of them escaped. Maclean was one who did. After an excursion to kidnap a Persian general in Isfahan, he was recalled to London and told that his next mission was to be dropped in Yugoslavia and to work in coöperation with the Partisans under Tito, then an almost legendary character. “What we want,” the Prime Minister told him, “is a daring Ambassador —

leader to these hardy and hunted guerrillas." He flew with a small group to Yugoslavia and there he stayed until the Partisans joined with the invading Russian Army to capture Belgrade — the top British officer in that hard, irregular campaign, fighting, marching, organizing resistance, speeding up supplies and air support, faithfully giving aid and comfort to Tito's followers; at once soldier, diplomat, and to some degree a maker of policy. He carried out this important and difficult assignment with brilliance, and then he flew home — to what other duties he does not tell us. At that time he was just thirty-four years old. What a man!

While his book lacks the *mystique* and poetry of Lawrence's writing, it is clear and lively always, at times breath-taking in its hard, nervous description of action. He is equally impressive as a writer and as a man of action.

2

If *The Jungle Is Neutral* is a less sparkling story than Brigadier Maclean's, it is due to the nature of the experiences described and not to the author's inability to write about them. Colonel Chapman had no brilliant contacts with high-ranking politicians or soldiers. In fact, he had only rare and difficult contacts with any men of his own race, hunted men living precariously in jungle hide-outs, ill and hungry like himself. Mostly he lived and worked with groups of Chinese Communists, who made up the only effective underground resistance in Malaya after the fall of Singapore. He drilled these willing but unmilitary guerrillas, taught them jungle craft, helped provide arms and munitions, and, under the greatest handicaps, kept everlastingly fighting the Japs and sabotaging their communications. His was largely a lonely endurance of intolerable conditions. Mere survival was a triumph, moral and physical. That he succeeded in his mission is a tribute to his courage, his sagacity, and his unconquerable will.

Colonel Chapman was a schoolmaster just prior to the war, with a taste for outdoor life and considerable experience as a mountaineer and explorer. After enlisting in the army he contrived to get special training in commando and field work and became an instructor in these arts of irregular warfare. The strange destinies of war took him to Australia and later to Singapore, where he continued to instruct Europeans and natives in guerrilla tactics. As the disastrous Malaya campaign developed, he carried on reconnaissance behind the Japanese lines and was finally, with two other officers, "left behind" as part of an organization of saboteurs — an organization which was promptly swamped before it could get going. The three of them, however, while they still had demolition material, "derailed seven or eight trains, surely damaged at least fifteen

bridges, cut the railway line in about sixty places, damaged or destroyed some forty motor vehicles, and killed or wounded somewhere between five and fifteen hundred Japs."

Alas, these days of achievement were numbered. Singapore fell. Their caches of food and equipment were captured by the Japanese or looted by natives. There was no place for them to go. Attempts to escape to India proved abortive. Most of the other British "left-behinds" succumbed to disease, hardship, and despair. At last Chapman established contacts with the Chinese Communists and for three years worked with these strange groups as friend, adviser, instructor, and leader. Three years — "Missing, believed killed," with no means of communication, with no equipment or transportation, with no hope but his courage; wounded, captured by the Japanese (from whom he promptly escaped), underfed; weakened by every form of tropical disease and discomfort from mosquito and leech bites, through ulcers, jungle sores, dysentery, and recurrent malaria and other fevers — he kept on, always with destruction, capture, and torture at his elbow. He overcame incredible hardship, the utmost physical torment and spiritual depression, and when, at long last, radio contact with the outside world was established and he left by submarine for Colombo Headquarters, he was conscious that he had created a disciplined force which needed only equipment to be formidable.

Of course, he returned to Malaya and was there for the final Japanese surrender. He had earned that reward. Viscount Mountbatten, his commander, said of him: "I very much doubt if anybody else can equal his adventures or achievements"; and Mountbatten should be a good judge of both. Surely here is the record of a great and gallant spirit — a "brave heroic mind, worthy his country's name." And, as is often the way with heroes, he tells his story so simply, in such plain, factual prose, that it is only by its cumulative effect that you are overcome by its extraordinary quality.

These two books are very different expressions of the same fundamental heroism — one is gay, gallant, sophisticated, and brilliant; the other is a sober, serious record of endurance and suffering. But both are the products of a rare breed of men. They lived very dangerously and they stuck to their jobs until they were well and truly accomplished.

Recently I heard a speaker say that the first time the Book of Common Prayer was used on North American soil was when Sir Francis Drake, that intrepid Elizabethan, landed on what is now San Francisco. On that occasion this prayer was read:

"O Lord God, when Thou givest to Thy servants to endeavor any great matter, grant us also to know that it is not the beginning but the continuing of the same until it be thoroughly finished which yieldeth the true glory."

Books and Men

Horace Walpole was one of the greatest connoisseurs and certainly one of

the greatest collectors in the eighteenth century. The supreme collection of his books and of the relics which surrounded him at Strawberry Hill now reposes in the home of WILMARTH SHELDON LEWIS in Farmington, Connecticut. A graduate and trustee of Yale University, Mr. Lewis is the editor of the Yale edition of Horace Walpole's *Correspondence* and the author of other delightful volumes on the eighteenth century. He is now writing an account of his experiences as collector, editor, and bibliophile.

"YOU KNOW ALL ABOUT BOOKS"

by WILMARTH SHELDON LEWIS

I

THE collector is credited by his non-collector friends with bibliographical omniscience. "You know all about books," he will be told, and the expression on the face of his informant is that of one looking into illimitable distances.

If you try to disabuse your friend you will not succeed. He wants to think of you as being omniscient so that he (or more probably she) can shine in your reflected rays. Besides, there are the books in the attic that came from Aunt Emily.

"I don't suppose they are worth anything," your friend says as you head for the attic, "but I've always heard that Aunt Emily's father was a great reader." Excitement mounts as you proceed. "I saw where Dr. Rosenbach paid \$30,000 for a book the other day," your friend tosses over her shoulder, and the cat is out of the bag. "This is one of the oldest ones," she says, "*The Sermons of Jonathan Edwards*, 1821, printed in Philadelphia. Over a hundred years old." "Would Dr. Rosenbach give \$30,000 for it? He is from Philadelphia." The question, unasked, hovers on the air. You, the omniscient, are now at the crisis. Your next words will mean \$30,000 half-invested already, or else disappointment, which will be turned upon you. You must be banker, judge, and priest.

One way out is to say, as you put the book in your hand carefully down, "Do you want me to tell you the truth?"

The answer, on a falling note, is, "Why, yes, of course."

Then you say that the collection is not really valuable in the book market, that the prices given for books do not in many cases reflect their intrinsic worth, that this collection, for example, which came from her Aunt Emily, and so on, and so forth. The final question is usually, "Well, what shall I do with them?" and then you suggest that they be sent to a library, since a library can always find something it wants in any assemblage of books

and it has ways and means of disposing of the rest.

But not all such visits are awkward. "Mother would be awfully pleased if you would look at her library and tell her if it is worth anything," a friend once told me, and my heart sank. When we walked into the library I saw the rows and rows of "standard sets" I had expected, but in one section there were many of the most sought-after books in English literature: Herrick, George Herbert, Shakespeare's *Poems*, 1640, an uncut copy of Gray's *Elegy*. They had been collected, I learned, by the lady's late husband.

Mother and son were delighted by my enthusiasm. "And do you collect anything?" I asked her.

"Oh, yes! I collect a man named Blake. I'll show you some." She got down on the floor, opened a drawer below the bookcase and began tugging at a portfolio that was lodged behind some bulky books. A final wrench was successful, and the portfolio containing original drawings by Blake forced out upon the floor the first four folios of Shakespeare.

Treasures may be found in attics and other unlikely places. There was, for example, the sleeping porch where my attention was called to a dress box filled with printed matter that had been dismissed by the appraisers of the estate of which it formed an apparently ignoble part as of "no value." In it was an eighteenth-century New Haven pamphlet of which only one other copy is known. Shortly after a Button Gwinnett signature was sold for \$32,000, a friend went up to her attic to see if by any chance there was a Gwinnett signature in the collection of autographs made by a deceased aunt. There was one, together with letters of all the Signers of the Declaration of Independence. These she sold and built a house with the proceeds.

Gain may be in the minds of those who ask you to look at their books. "I understand you are a book-collector, sir," the barber at Brown's Hotel

in London said to me one day; "I have some of my collection here to show you." He had waited until my hair was half cut. "I collect all kinds of books, sir; here is my Barrie." He handed me a copy of *Quality Street*, which I opened cautiously to keep the back cover on. The title page was torn in half and a child or an idiot had made zigzags throughout the book with colored crayons. I was not the first person who had been shown the book while its owner cut hair. "And here," he went on, with his scissors suspended, "is part of a sporting work, *Jorrocks*, sir." "Part" was accurate, for not only was there but one volume present, half of that was missing. "Oh, yes," I murmured, not knowing what else to say.

"I can't stay out of bookshops," the barber resumed his snipping, "no more than you, sir. Of course I don't bother with the West End people, Quaritch, and such, but I like to browse along Charing Cross Road," the snipping ceased. "By the way, sir, would you care to buy my library? I'd let it go cheap, sir, to you." I thanked him, said no, I thought not, but added that I would be glad to have a shampoo. As I stepped out of the chair the barber looked at me coldly. "Is it that my collection is not good enough for America?" he asked.

A less subtle approach, but one fraught with danger, is when someone writes to the collector to say that he has a book he would like to sell; the collector is to fix the price, about which the writer is sure there will be no difficulty. If it is a book that the collector wants he must proceed with caution, for the owner will assume that any price the collector offers is too low. In only one way can the collector be certain of avoiding an unpleasant experience and that is by not mentioning a price and by suggesting instead that his correspondent have the book appraised by the best-known dealer in his community.

To illustrate how this works: a stranger wrote to me to offer a book that I wanted. My guess was that it was worth about a dollar. I was tempted to tell my correspondent that I would give her five dollars for it, but instead I suggested that she take it to the nearest rare book dealer for his advice. She did so and was surprised to learn that he would pay her only fifty cents for it and would sell it for a dollar. Would I give her two dollars for it? I gave her the two dollars and was considered generous, whereas if I had offered her five she might have thought the book was worth ten or fifty.

Perhaps the last place one expects to find unsuspected treasures is under the roof of a famous dealer, but unsuspected treasures are everywhere. One morning I called on Mr. Milton Samuels of French and Co., in 57th Street, to see two miniatures of Mary and Agnes Berry. As I was about to leave without buying them (a mistake I've since regretted), Mr. Samuels said he thought they had a book in the library that would interest me. It

was probably, I said to myself, a copy of the *Strawberry Hill Sale Catalogue*, of which I already owned at least twenty copies, and I hesitated. Should I be polite or should I make up an excuse and leave? I decided to be polite. "It's a copy of the *Strawberry Hill Sale Catalogue*," said Mr. Samuels, as we rose in the elevator.

The librarian produced the book with pleasure. There were other catalogues bound with it, and I opened the book to two pages covered with Horace Walpole's writing, his notes in the sale catalogue of Lady Elizabeth Germaine's collection. In the *Description of Strawberry Hill* Walpole had written, "The following collection was made out of the spoils of many renowned cabinets: as Dr. Mead's, Lady Elizabeth Germaine's, Lord Oxford's, the Duchess of Portland's." I had already acquired Walpole's copies of the sale catalogues of the last two collections, as of course I told Mr. Samuels. He then insisted that I must have the Germaine catalogue as a present, that a photostat of the catalogue would serve their purpose just as well as the original, and he forthwith sent the volume to Macdonald, the binder, to have the Germaine catalogue removed and given to me.

Again, one afternoon Dr. Rosenbach showed me the treasures of his house in Philadelphia. The tour ended in his bedroom; the last object we looked at was to the left of the door. It was a colored caricature of an auctioneer selling his wares and was labelled, "Eloquence, or the King of Epithets." Below it was an eighteenth-century manuscript note, "Christie, the auctioneer, 1782."

"Why," I asked my host, "have you never told me you had this?"

He was puzzled. "Why should I?"

"Because of that note!"

He looked again, and then expressed himself with all the vigor of which he is a master, adding, "I've looked at that print for twenty years without taking it in, yet *anyone* could see that is Horace Walpole's handwriting! Here," and he unhooked the picture impatiently from the wall, "take it, it's yours."

2

THERE are also the occasions when the collector is asked what to do with collections of family papers. "We have all of my grandfather's letters," you may be told, "and we don't know what to do with them. The children aren't interested, and we hate to destroy them." These, too, are probably in an attic, and are in the condition that you thought they would be in, all mixed up in an old trunk with labels of famous European hotels on it.

You are on even more delicate ground than you were with the books, but presumably grandfather was a person of importance. With the increased interest in American history such papers are now prized by scholars as source material. Again, I

usually say that in my opinion the place for them is in a library.

The question is then, Which library? In this country there are five types of libraries to consider: municipal libraries, university libraries, state libraries, historical societies, and "special" libraries, such as the Clements, Huntington, and John Carter Brown. Also, and perhaps first of all, there is the Library of Congress. Which is the best library to give a collection of family papers will depend upon their character, whether they are primarily concerned with domestic or foreign affairs, or literature and the arts, or purely local matters, such as the logs of sailing ships or the diaries of pioneers, or papers that throw light on living conditions, such as tradesmen's bills or firm accounts. If the papers deal primarily with local matters, the state library or historical society is perhaps the place for them, yet one cannot be dogmatic about it.

The important question is, Where will they be put to the best use? It may be that a great research library far from the scene of the papers' setting will be the best place for them. Manuscripts are quite useless without large collections of reference books, journals, and all the apparatus of scholarship, and these are seldom found in small libraries.

Perhaps the question is not Where to give the papers, but Whether to let Professor X use them. When strangers ask the owners of such papers if they may use them the owners are often at a loss what to reply. It is flattering to receive such requests from scholars, particularly when they come from overseas: everyone likes to feel that he owns something important enough to be put in a book, and if what is wanted concerns one's family the request titillates family pride. But the owner probably knows nothing about this stranger who has asked to see the family papers, and little about academic research; therefore, he feels ignorant and at a disadvantage.

Most owners want to do the right thing in such circumstances, but they don't know what that is. In their bewilderment they may turn to a collector-friend for advice. "You know all about these things," they will say to him, and then they may ask some pertinent and difficult questions, such as, If Dr. X publishes the papers, how will it affect their salability? Should he be allowed to publish whatever he wants from them? Can he be trusted not to steal them while he is having them copied or photostated?

Large collections of family papers are not usually salable unless they concern a collected literary figure. The average collector does not want family papers; collectors like Huntington and Clements who did buy family papers are rare. The letters and papers of a man who was an early governor of Arkansas or Minister in Vienna under Polk may prove that he played a more significant part in our history

than has been usually suspected, but most collectors dislike bulk, and collectors make the book market.

I think it is true that if the papers are chiefly of political interest, publication of them will have little influence upon their salability unless they concern a figure of major consequence who is collected, such as Washington and Lincoln, but that if the papers concern a literary figure of importance publication may affect their value considerably. Booksellers are divided in their opinion as to how publication affects the value of a manuscript. Some booksellers are convinced that publication lowers the value of a manuscript, and decline to give a photostat of an unpublished manuscript belonging to their firms unless the buyer agrees not to publish it. Other booksellers will let scholars print their unpublished manuscripts, and apparently do not feel that they are worth less money in consequence of their publication. There are some collectors who think better of a manuscript if it has been printed and others who think less well of it. In general, I think this can be said: a literary manuscript increases in value with its printed fame. If one of the three known manuscripts of Gray's *Elegy*, for example, came upon the market it might fetch \$10,000. If the manuscript of an unpublished poem by Gray should be discovered, even though critics may decide that it is a finer poem than the *Elegy*, it probably would not fetch one tenth as much.

But the final answer to the question, Does publication of an unpublished manuscript hurt its value in the open market? cannot be answered categorically, "Yes," or "No." The circumstances connected with each manuscript must be weighed, and the bemused owner will be fortunate if he gets intelligible advice.

3

Most owners of family papers are unwilling to have discreditable facts in the family's recent history published. A family whose papers go back to the fifteenth century presumably does not care a hoot what is discovered about them at that time; it may, in fact, be amused and even proud of any kind of hanky-panky, but how far back does "good taste" require the protection of reputations? Suppose your grandfather were a great poet and you discovered in his papers that the famous Helen of his love poems was something more substantial than allegory. Suppose Dr. Y of the University of Utrecht or Cambridge or South Dakota wrote you and told you that he was writing a book on this problem and would like to examine your grandfather's papers, what would you reply?

I can see that if you had sat on the great man's knee and listened to his tick-tock you might feel that it was none of Dr. Y's business, and, even, perhaps make up your mind, in order to settle the question once and for all, to put the letters in the

fire. But what if grandfather had died years before you were born? What, if instead of his being your grandfather, he had been your great-grandfather or great-great-grandfather? When is it no longer bad taste to permit publication of something discreditable about a relative of historic importance?

I once discovered how strong feeling can be about people who lived as far back as the eighteenth century. An elderly in-law of the Walpole family had in his possession a long unpublished account by Horace Walpole of a family row in which Horace did not appear at all well. This I was permitted to take only on the condition that I *would* publish it, for the elderly in-law hated Horace Walpole.

The owner will be influenced in his decision whether or not to turn his papers over to Dr. X by the letter the petitioner has written, by its tone, by the way the request is expressed, by the handwriting, by the paper. The English, being more formal than we are, note more things in a letter than we do. They have a ritual in letter-writing, which should be mastered before dealing with them. Breaking any of the rules of this ritual may convince the English owner that he does not want to have anything to do with the violator: the infractions are proof of his incompetence. The late Duke of Richmond and Gordon, for example, was not predisposed in favor of the American scholar who wrote to him for permission to see the papers at Goodwood and addressed his letter to "Messrs Richmond and Gordon."

Owners of any country are annoyed by a trait that is rather common in scholars. This is the assumption that all the papers relating to "their" men really belong to them and that the people who temporarily control the papers (through the accident of inheritance or purchase) should hand them over without delay. To a man who seems to be a nuisance British owners may reply, if they do reply, that the papers are no longer in their possession. Americans are more apt not to reply at all.

The question of Dr. X's trustworthiness will rarely be raised by American owners, to whom his Ph.D. gown is a mantle of honor; but it may be asked in England. To the average British owner, American universities and colleges are pretty much alike. One of the most familiar reasons given by English owners for the disappearance of family papers is that they were borrowed by an American scholar and never returned. This is too bad, for whatever Dr. X's fault may be, he will not steal. And he may be sound, accurate, and imaginative; in short, it is quite possible that he is just the person to give the papers to the world.

I used to wonder if there were not some way of making it easier for scholars to meet owners. Could there be a committee in this country to which a man might write for help in paving the way to a

private owner of papers the scholar wanted to see? The committee would have a London office that would forward the request to the English owners. I saw it working like this: Dr. Jones of Oklahoma states his case to the committee in New York. He is writing a book on A, a minister of state in the reign of Charles II; he has reason to believe that A's descendants in Yorkshire have unpublished papers of importance to him. Would the committee, through its London office, arrange with the present A for Dr. Jones to see the papers? I was assured by English owners that they would be delighted with such an arrangement. When the committee told them, "Dr. Jones of Oklahoma is O.K." they would let down the drawbridge, raise the portcullis, and welcome Jones to the muniment room, but when the committee said, "We do not recommend Dr. Smith of Kansas," they would leave their defenses unbreached until a worthier applicant appeared.

In the last week of 1937 I talked on this subject to the Modern Language Association in the ballroom of the Hotel Drake in Chicago. It was rumored that there was to be some sort of amplifier on the platform. Beside the lectern was a small crystal globe on the top of a brass rod. It had no receiving or sending device that I could see and I wondered if it did not have some connection with the Christmas season, but the other speakers and I were students of English literature, not of electricity. One and all we addressed ourselves conscientiously to the crystal ball. When I finished I followed the wire that came out of the brass rod and stretched along the stage. The wire ended quite far from any base plug. What it would have done if it had been plugged in I have no idea, but as it was it seemed to me not without symbolic significance, for nothing came of my proposal, and I doubt if anything ever will. There are too many difficulties.

Even supposing that one of the Foundations were willing to finance such a clearing-house, would it not be impossible for the committee to exercise any discrimination in its recommendations? They could not go into every applicant's history and decide whether or not his Ph.D. covered a deserving candidate; if they attempted to discriminate, would they not get into hot water? The rejected would write direct to owners as before and until the owners knew about the Clearing-House for Deserving Scholars the undeserving would continue to mess things up. One older scholar who heard my talk at Chicago told me that it was better to let people flounder along, that the deserving would ultimately be successful, and the undeserving would fail. Perhaps this is so, but if the English-Speaking Union or some other Hands-Across-the-Sea society should solve the problem they would contribute to the peace of mind of British and American owners and to the reputations of scholars.

THE ATLANTIC Bookshelf



THE *Peripatetic Reviewer*

BY
EDWARD
WEEKS

IN MY first year at Harvard, the *Harvard Advocate*, a struggling literary sheet, announced a short story contest with a first prize of \$25 in gold. I entered a manuscript with the alluring title "Ink," and at the end of the judging my story was declared the winner. But the *Harvard Advocate* was very hard up in those days, and instead of paying me the \$25 in gold, they elected me to the staff, no money changed hands, and everyone was supposed to be satisfied.

As the assistant editor of the *Advocate* in my second year, I soon discovered that our circulation was limited to members of the Freshman Class and to the parents, aunts, and uncles of the editors. Indeed we were so short of cash and advertising that in desperation we decided to produce a special issue, an issue which would satirize some well-known New England institution. After looking over the available targets, it seemed clear to us that the *Atlantic Monthly* of 1920-1921 was the easiest thing for us to parody. That was the year in which Ellery Sedgwick had published at length a somewhat remarkable diary by Opal Whiteley. So for our leader we had an article entitled "The Journal of a Bleeding Heart" by Isette Likely.

Mr. Sedgwick was also featuring a series of articles written by inmates of American prisons who had different reasons for objecting to their board and lodgings; so in second place we had an article entitled "Prison Cruelty in the Harvard Yard." The *Atlantic* of 1921 seemed to be troubled about the morals of the Younger Generation, and to make fun of this alarm, I wrote an article on babies—"Babes I Have Known." We ran through the entire twelve issues of the *Atlantic* and picked out the four goofiest poems, and these we reprinted, giving them in each case what seemed to us a more appropriate title. We had no trouble soliciting advertisements for this mock issue of the *Atlantic*,

and on the cover we superimposed a replica of the *Atlantic's* buff-brown Table of Contents so that at a distance we looked like a somewhat younger brother of the rather austere sheet.

When the advance copies came off press, the President of the *Advocate* and I went in to see Mr. Sedgwick. I remember with what trepidation we entered his big high-ceilinged office on Arlington Street, and I remember holding our presentation copy of the *Atlantic* behind my back as we approached his desk and shook hands. When we were seated and he asked us what he could do for us, I solemnly laid the copy before him. His face was expressionless as he skimmed the Table of Contents; then with a snort he began reading in and out of the opening pages. Then his snort turned into laughter, and I knew our case was won. When we left, it was with an order for 1000 copies of our parody issue, to be distributed to the colleges which were using the *Atlantic* as a textbook in English.

It would be a nice Horatio Alger touch if I could add that, from that moment on, Ellery Sedgwick had his eye on me, but such is not the case. Three years later, in 1924, when I was employed as the First Reader for the *Atlantic*, no one on the staff remembered that I had ever been impelled to tease the magazine. It was simply a case where I came to scoff and remained to pray.

As I look back across the vista of twenty-five years, back to my early and oh, so peaceful days on the *Atlantic*, these are the things that stand out in the primer of my experience. As the First Reader, I had to read up to my capacity of unsolicited manuscripts every day, and I had to stretch that capacity month by month. As a student and in the Army I had been a very slow, meticulous reader, seldom doing better than forty pages an hour; now I found that by narrowing my gaze and reading down the center of the page, I could get the sense and, where style was involved, even the flavor of the prose. At the end of six months I had increased my rate of reading to the point where I was consuming sixty-five envelopes of manuscripts five days a week.

In that time I was also learning to dictate. At the outset I did not trust myself before the level gaze of my secretary. I used to make notes for my letters of rejection on the back of every envelope, and then read from them. But after six months I no longer needed the notes except in the most difficult cases.

More important still, I was learning that editing is essentially a calling for innumerable decisions. Some of the decisions are very easy; some of them so difficult that they must be held over and thought about for days. The decisions of the First Readers are, of course, confined to the rejection or recommendation of manuscripts: I simply wrote down what I thought of them on the envelopes, and the Chief made the final choice of what we printed.

The 1920s were for all editors a time of very pleasant security. It was a time when fiction was ripe and plentiful. You never had to worry about good short stories or good novels to serialize. It was a time brimming with poetry; poems by Robert Frost, Edwin Arlington Robinson, Archibald MacLeish, Stephen Vincent Benét, Elinor Wylie, Carl Sandburg, and Amy Lowell were coming to us at regular intervals. I remember how hard Mr. Sedgwick had to work to find anything to argue about. Prohibition was the one staple subject of controversy, divorce came next, and one or two of our economists were beginning to question the soundness of the credit structure and the pyramiding then rising to new heights in Wall Street. But no one worried about war, and no one had ever heard of atomic energy.

England before and after

Robert Henriques, whose novel *No Arms, No Armour* won him many readers here and in England, is a man of the right talent and age to appreciate the enormous changes which have overtaken England since the 1920s. In the Second World War he served in the Commandos and then as liaison officer between Patton and Montgomery; Wingate, who was his close friend, wanted him to be chief of staff on the hazardous expedition in Burma. At the war's end, Colonel Henriques turned back to his writing and experienced the rustiness which afflicts any creative artist who has not been practicing. But he was in no hurry; he had a fertile farm to attend to, and one or two volumes of official army history to exercise his mind.

Gradually the scope of his new book began to open up. It was to be the story of an English country family, a family long accustomed to leisure and command, whose money had dwindled away through bad management and expensive tastes; it was to be the story of two generations: the older dispossessed and disintegrating after the First World War, the younger remembering the golden days but living in constant jeopardy as they experience the hazards, the losses, and the austerity after Munich. Five years of writing and reflection have gone into his new novel, *Too Little Love* (Viking, \$3.75), a capacious, warm-blooded, beautifully conceived story of England before and after.

A family novel designed, as this is, to cover two decades must have plenty of length in which the characters are to grow. So the story has been di-

vided into four Books. It begins in the Cotswold hills the week before Christmas in 1926 with the Hunt gathering at Neapcaster Park, the comfortable, well-staffed country place of General Harry Meredith, measuring "twice five miles of fertile ground" — an estate to all appearances as solid as the massive house where the Merediths have lived so well for so long.

From the small talk in the village, it seems to be common knowledge that things are now going poorly with the General; his farms are run-down, and even though he has been selling off his property he still cannot meet his creditors. At the dinner party which follows the Hunt, fortified by the Lafite '95 he breaks the news to those who are dearest to him that he is selling out.

The loss, which the General takes as a personal defeat and which aggravates the flirtatiousness of his wife, is only part of a larger ground swell, as the General's Agent, young Geoff Greenley, comes to realize in his desperate efforts to hold even a fragment of Neapcaster together in the early 1930s. In this the second Book, Geoff emerges as the central figure in the story; it is Geoff who opposes the adversity setting in after Munich, and it is he who in the fourth and final part of the novel shows to us, on his homecoming after seven years in the Service, how deep and implacable are the changes which twenty years have wrought in those Neapcaster people.

These people are individuals who typify the different strands in Britain's fabric: the General is the generous, improvident squire, and Ralph his son the selfish, tough-skinned hedonist; Anne Meredith is the impulsive Lady Bountiful, and her lover Colonel Black is the thin-shanked horseman living by his wits and his charm. The huge and successful Danny Levine is the Jew whom the English admit and admire and taunt; the brusque redhead Dr. Macdonald is the uprising Socialist; and Geoff, the conscientious Agent, is the English dependable, strong in tradition and resourceful in change.

I find this an absorbing book to live in whether I am enjoying the luxuriousness of Neapcaster before the fall, or reliving the anxiety before Munich, or realizing with fresh perception what England is like when the pinch is on. Colonel Henriques is a stylist and a poet. He has a tendency, I think, to concede more emotion than I find plausible in his men. I find it plausible that young David would scream when his horse rolls on him, but implausible that young Geoff, a robust sixteen-year-old, should vomit twice in a single day at sights which disagree with him. But this is simply a question of squeamishness, and there is not much of it in the big book. It is a big novel and an absorbing one, a panorama of English character set against a countryside well known and beautifully described, and integrated with a social commentary penetrating and illuminating.

Reader's Choice

BY

CHARLES J. ROLO



ON January 27, 1940, Franklin D. Roosevelt signed a contract to become a contributing editor of *Collier's* magazine, at a salary of \$75,000 per year, as soon as his second term as President expired. F.D.R. was to be supplied with several assistants and he would write twenty-six articles a year, "subject to editorial control," for a period of three years. A few days after signing the agreement, Roosevelt entertained the editor of *Collier's* at the White House and introduced him around as "my future boss."

The foregoing item — a telling contribution to the continuing post-mortem on Roosevelt's third-term intentions — is one of the disclosures in the substantial body of new material contained in **John Gunther's *Roosevelt in Retrospect: A Profile in History*** (Harper, \$3.75). Books about Roosevelt have been pouring out at a great rate, but, as Gunther reminds us, "it is a fact that no reasonably full biography exists in print today." Gunther's attempt to fill this gap makes no claim to being much more than "a preliminary sketch." But though the author is a master of compression — he has covered whole countries in a brief chapter, whole continents in a digestible volume — his "sketch" of Roosevelt runs to 379 pages.

Dividing his book into three parts — The Character, The Life, The Death — Gunther has profiled Roosevelt in the somewhat helter-skelter and incomparably lively manner of his "inside" reports; there is the same alertness to intriguing trivia, the same profusion of effective anecdotes, and the same remarkable inclusiveness. *Roosevelt in Retrospect* performs at least two valuable services. It furnishes a timely and well-documented riposte to the post-war diatribes of the 100 per cent Roosevelt-haters. At the same time — though Gunther is a staunch admirer of F.D.R., and also because of this — his book should give readers in the Roosevelt camp a sharpened and heightened sense of the late President's failings. One gets a very clear picture of F.D.R.'s prodigious deviousness; his tendency to ingratitude and his tendency to be grandiose; his maddening garrulousness; his overweening self-confidence (just before Yalta, he boasted: "Stalin? — I can handle that old buzzard"); and other weaknesses. Sometimes Gunther steps squarely into the role of apologist, but he also delivers such blunt

judgments as, "The plain fact of the matter is that Roosevelt did not *like* to think. . . . It has been aptly said [he] 'played everything by ear.'"

The book's primary emphasis, of course, is on the qualities that made Roosevelt so commanding a figure. The chief of these, Gunther suggests (in diametric contradiction to the main charge of Roosevelt's enemies), was F.D.R.'s uncanny sensitivity to the feelings and desires of the nation — "the whole energy of the country flowed into him and through him." Perhaps the thing that stands out most vividly in Gunther's portrait is the phenomenal affirmativeness of Roosevelt's temperament: his zest for life and, no less, for the rough-and-tumble of politics and the stupendous burdens of the Presidency; his courage, resilience, and deep-seated optimism.

On the "human interest" side, Gunther has assembled a stunning amount of material. We learn that F.D.R.'s favorite movie star was Myrna Loy, his favorite cartoon that of a little girl who scrawls his name in the snow and is told not to use dirty words. Among Roosevelt's special likes, Gunther lists: going on trips, charts, trees, archives, politicians of every sort (even bad), islands, seersucker bedcovers, the word "pipelines," a cocktail made of gin and benedictine, and the future. Among his pet hates were air conditioning, gloves, and the term "bureaucrat." His reading consisted of American history, nautical books, and trash; there is no record of his ever having read a page of Darwin, Marx, Freud, Tolstoy, or Proust.

"No man is an Island"

Roosevelt's strong hope that international co-operation could be achieved on a lasting basis had its roots in what Gunther calls his "central belief": namely, that man is fundamentally good — a notion not much in evidence today. The disillusionment caused by events since the war has led to a conspicuously increased emphasis on the fundamental no-goodness of man: the irrationality and basic aggressiveness of human nature — or, in theological terms, its sinfulness. The predominant intellectual tendency, it would seem, is to stress the feebleness of reason; to question man's ability to remedy his basic ills through social action; and to doubt that science, even if it does not blow us to pieces, is going to make the world much pleasanter.

This whole line of thought is challenged in a little book written not by an expert in uplift but by a distinguished anthropologist, **Ashley Montagu**, who has held posts at Harvard and the British Museum and is now Chairman of the Department of Anthropology at Rutgers University. Drafted specifically for the layman, *On Being Human* (Schuman, \$1.95) presents the thesis, based on "the facts of biology as we know them today," that the natural law of life is not conflict but coöperation; and it claims that "science is in a position

**A great subject
PLUS
A brilliant writer
EQUALS
An absorbing book**

ROOSEVELT IN RETROSPECT

A Profile in History

By
**John
Gunther**



The first book to deal objectively and impartially with F.D.R.'s character, background and career. Here is the man—life-size and human—in a book that will be avidly read both by Roosevelt's admirers and his detractors. \$3.75

**The Final Four Volumes of
THE PUBLIC PAPERS AND
ADDRESSES OF**

FRANKLIN D. ROOSEVELT

Compiled with Special Material and Explanatory Notes by SAMUEL I. ROSENMAN. "These volumes, and their predecessors, constitute the most comprehensive history of the Roosevelt era that we have."
—HENRY STEELE COMMAGER,
N. Y. Herald Tribune.

4 volumes, boxed, \$40.00
Leather edition, \$75.00

HARPER & BROTHERS
49 E. 33rd St., N. Y. 16

to teach man . . . that his problems in human relations can be solved."

Dr. Montagu's book, which integrates the findings of a number of scientists, is a rebuttal of the doctrine popularized in Darwin's name — "the gladiatorial conception of evolution," which dominated a whole generation of sociologists and has bequeathed to us the tradition of "rugged individualism." Certainly aggressiveness exists in nature, says Montagu, but the evidence strongly indicates that "the survival of the fittest" actually means the survival of the most co-operative; natural selection favors the most socially oriented organisms. The resulting view of man which Montagu develops is suggested by the famous line of Donne, "No man is an island, intire of it selfe."

"There is not a shred of evidence," Montagu writes, "that man is born with 'hostile' or 'evil' impulses. . . . The impulses toward coöperative behavior are already present in him at birth" — in the infant's drive to receive love (security) from its mother and in its responsiveness to love. If deprived of love, the infant is, in effect, deprived of experience in coöperation, with lasting antisocial consequences. Social, coöperative behavior is simply the continuation of the parent-offspring relationship, and thus has its origins in the reproductive process itself — in the very basis of life. The trouble with our society (besides the fact that babies don't get enough loving) is that, being inordinately competitive, it runs counter to the laws of natural survival.

This drastic summary, of course, conveys at most the general direction of Montagu's thinking. I recommend his book to anyone interested in the matter at stake, even though the final prescriptive chapter is a bad let-down. Here the author seems suddenly to be standing on a soapbox. It may conceivably be true that human relations can only be bettered by so educating the next generation that it sets about changing the competitive pattern. But this is the kind of utopian idea which an author should wistfully murmur and not brandish as a formula for salvation.

"The World's Rejected Guest"

Turning from Dr. Montagu to Richard Aldington's new biography of D. H. Lawrence, one finds a striking instance of correspondence between the findings of the scientist and the intuition of the artist. "I think

societal instinct much deeper than sex instinct," Lawrence once said. "What ails me is the frustration of my primeval societal instinct." The burden of Lawrence's savage complaints about society was not that man was essentially an unsocial animal, but that modern society itself was unsocial — that it heightened man's "separateness."

The Lawrence legend has pictured him as a passionately antisocial individualist, and not without cause. The central contradiction of Lawrence's endlessly self-contradictory personality, the conflict which colored all of his life and energized his work, was between a deep hostility to "merging" and a counterimpulse to shed his painful sense of separateness. In his life, Lawrence tried to solve the problem by projecting himself beyond its reach: by seeking to become, Aldington points out, a kind of god-head.

It is primarily with the man's life that Aldington's *D. H. Lawrence: Portrait of a Genius But . . .* (Duell, Sloan and Pearce, \$3.75) is concerned — the odd subtitle is explained as being the phrase customarily applied to Lawrence. Aldington has given us a biography which seeks "to avoid literary criticism and . . . quasi-philosophizing"; a very admirable and absorbing book with one limitation. Its great merit is that it is both intimate — Aldington knew Lawrence well — and marvelously objective, a thoroughly realistic portrait which rescues Lawrence from his legend (among other things, Aldington shows that, contrary to legend, Lawrence was not at all badly off after his first few years as a writer).

A monument of inconsistency, Lawrence was consistent in one thing, his "great religion," his belief in "the blood and the flesh as being wiser than the intellect"; in the absolute virtue of "spontaneous" living. He insisted that it was healthier to throw a plate at one's wife than to reason with her, and it is well known that he acted accordingly. When Huxley, in the course of an argument, said, "But Lawrence, look at the evidence," Lawrence answered, tapping his solar plexus: "Evidence doesn't mean anything to me. I don't feel it *here*." Assertive, quarrelsome, perverse (as he himself remarked) "to the point of insanity," he was also often gentle, charming, and reckless with his friendship. And always he generated an extraordinary radiance which

made everything around him seem to live more vividly.

The limitation of Aldington's common sense approach is that the crucial insights about Lawrence have to be wrested from a region which is beyond the ken of common sense. For as Huxley has observed, "Lawrence inhabited a different universe. . . . His special and characteristic gift was an extraordinary sensitiveness to what Wordsworth called 'unknown modes of being.'" Aldington never quite comes to grips with the new form of consciousness, the wholly new way of feeling, which is the great experience that Lawrence offered in his work.

The witch of Cool Clary

In *The Summing Up*, Somerset Maugham hazarded the opinion that the drama took a wrong turning when the demand for realism led it to abandon verse—"Verse has a specific dramatic value. It enables the drama to achieve a beauty that is out of the question in a prose play. . . . It delivers a play from sober reality." There have been signs, lately, of a renewed interest in poetic drama. It is a long time since any straight play has caused such a stir in New York as *The Cocktail Party*, and there has been a much greater stir in London over the plays in verse of Christopher Fry. Completely unknown eighteen months ago, Mr. Fry has had four plays produced with resounding success, and the London drama critics have chorused that he is the brightest hope of the British theater. After reading *The Lady's Not For Burning* (Oxford University Press, \$2.50), which is due to be produced on Broadway, I should say that Mr. Fry is without doubt one of the most exciting talents now writing for the theater in the English language. Along with *The Lady's Not For Burning* comes a slighter play by Fry, *A Phoenix Too Frequent* (Oxford University Press, \$1.75), a one-act comedy based on Petronius's story of the widow of Ephesus.

The dramatic values of verse mentioned by Mr. Maugham—the possibilities of beauty and the deliverance from sober reality—are shiningly apparent in Christopher Fry's work; also a further quality which is the special feature of his talent, the startling humor that can be achieved in poetic drama.

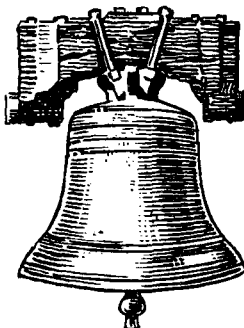
The Lady's Not For Burning is set in the year 1400, and the scene is the

Catherine Drinker Bowen

author of *YANKEE FROM OLYMPUS*

"A magnificent and also flawless literary achievement . . . it reads like a scroll of living history."—JOHN P. MARQUAND, *Book-of-the-Month Club News*.

JOHN ADAMS and the American Revolution



Two interesting and brilliant women, separated by 200 years of American life have found John Adams fascinating. Abigail Adams, the most charming woman in colonial society, married him. And Catherine Drinker Bowen, biographer of another great American—Oliver Wendell Holmes—now makes him the engrossing subject of a major event in American biography. "The reader comes to know, comprehend and like John Adams as probably no one has since Abigail."—FERRIS GREENSLET

A Book-of-the-Month Club Selection. \$5.00*

"A fascinating book—where is a story like it?"

—ALLAN NEVINS

Captain SAM GRANT

by LLOYD LEWIS

Author of *Sherman, Fighting Prophet*

This revealing life of the young U. S. Grant "will stand for a long time among the most lovable books in . . . Americana."

—CARL SANDBURG. \$6.00



"Incredibly daring . . . crammed with colorful material."

—ORVILLE PRESCOTT, *N. Y. Times*

Escape to Adventure

by FITZROY MACLEAN

"Hair-raising adventure in the great tradition of T. E. Lawrence and 'Chinese' Gordon."—WALTER MILLIS, *N. Y. Herald Tribune Book Review*. \$4.00

He reveled in the slaughter of America's sacred cows

THE IRREVERENT MR. MENCKEN

by EDGAR KEMLER

"A tale fresh on every page . . . packed with staggering surprises."—JAMES M. CAIN, *N. Y. Times Book Review*. *An Atlantic Monthly Press Book*. \$3.50



"Fascinating . . . every reader will find something to absorb him."—W. H. AUDEN, *N. Y. Times Book Review*

Berlioz AND THE ROMANTIC CENTURY

by JACQUES BARZUN

"Monumental . . . a really living book."—HERBERT WEINSTOCK, *N. Y. Herald Tribune Book Review*. Two Volumes, Boxed. \$12.50



At all bookstores

*An Atlantic Monthly Press Book

LITTLE, BROWN & COMPANY • BOSTON

BOOK BARGAINS

up to 80% off • money back guarantee

56 — The Cathedral at Chartres

Text in English by Georges Monmarche. One of the world's most impressive architectural masterpieces is completely revealed by the camera's eye in this extraordinary series of 49 photographs by Molinard (most of them full-page size). Printed in France. 5½" x 7". **Now only .98**

81 — Roget's Thesaurus of English Words and Phrases

The famous aid to better speech and writing by Roget. This wonderful reference volume is a gold mine of thousands of words and phrases, grouped according to ideas, and indexed alphabetically for quick reference. Bound in an attractive and durable gilt-stamped library binding. 705 pages. **A remarkable buy at only .49**

22 — Drawings of Goya

Famous Alpina Edition, imported from France. A large, 9½" x 13¼" portfolio of more than 40 of Goya's most noted drawings. Includes *The Disasters of War*, *Los Caprichos*, *The Bullfight* and other famous works. Magnificently printed in lush gravure on antique paper. **Only 1.98**

194 — Rome

By George Wharton Edwards. The artist-author offers a visual and literary sampling of the delights to be found in wandering among the treasures of ancient and modern Rome. Magnificently bound in a luxurious gold-stamped binding. The 23 full-color drawings and 28 monotone illustrations are reproduced with remarkable detail on a fine glossy paper. A large-size 8" x 10¾" x 2" heirloom volume, attractively boxed. Published at \$10. **Special price 2.39**

428 — Rembrandt Etchings

Alpina Edition (imported from France). 40 large-size (9½" x 13½") masterful reproductions of many of Rembrandt's finest works. Printed in lush gravure on antique paper. **Only 1.98**

132 — Greece

More than 125 striking photographs by Anton Economides. A pictorial history of Greek art and culture through the centuries, from the wonders of Cnossus through the magnificent Classic Era to Modern Greece. 12" x 8¾". Pub. at \$6.50. **Now only 1.98**

294 — Studies From Life

Adapted from drawings by La Lyre. 32 full-page plates that capture all the grace and beauty of the nude male and female figure. Of lasting value to artists and art lovers. 9½" x 12". Pub. at \$5.50. **Now only 1.98**

8 — Job

By William Blake. The illustrations of the Book of Job are the majestic climax to Blake's career. Each of these 22 engravings is a work of art. Includes an interpretation of each plate by Professor S. Foster Damon. 9" x 14" volume. **Now only 2.39**

310 — Scottish Clans and Their Tartans

33rd edition, 96 full-page Tartans in full color. Clan map of Scotland, histories of the Clans, list of names entitled to wear Tartans, etc. Bound in Tartan Cloth. 275 pages. 3½" x 4¾" size. **Only 1.49**

49 — The Dance

A Photographic Tribute. 88 pages of camera studies (most of them full-page size) of the world's greatest ballet performers and companies. The genius of the Sadler's Wells Ballet, Ballet de Monte Carlo, Ballet de Paris, Ballet Russe, etc., translated into magnificent photographic portraits of their principal artists performing the world's best-loved ballets. Printed in Paris. Flexible cover. 8½" x 12". **Only 1.39**

93 — Audubon Birds

Thirty of Audubon's superb bird prints on individual unbacked sheets (9" x 12") ready for framing. Reproduced in the authentic colors of the world-renowned originals from the Imperial Edition plates. All in a handsome portfolio. This series of Audubon Prints never before offered by Marboro. **Only 1.98**

16 — Van Gogh Portfolio

Imported from France. An outstanding collection of full-color plates that capture all the fire and feeling of the immortal Van Gogh originals. Ten individually-mounted plates on 6" x 8¾" mats. Easily framed — perfect for group arrangement. Includes *Sunflowers*, *Bridge at Arles*, *Boats at Saintes-Maries*. **Only .98**

111 — The Himalayas in Photographs

Imported from France. This world-renowned Alpina Edition presents the timeless beauty of nature's most awe-inspiring mountain range in 40 remarkable 9½" x 13½" photos, each plate printed in lush gravure on antique paper removable for framing. **Only 1.98**

212 — Bouquets

A Portfolio of 6 full-color Flower Prints by Jean Louis Préost. Faithful, true-to-the-original reproductions of six of the most beautiful and colorful flower prints ever created. Roses, Lilacs, Iris, Narcissi, Peonies, Tulips, Poppies, Pansies and other flowers appear with all their subtle shading and bright freshness. Each 9" x 12" reproduction on an individual sheet ready for framing. **Only .98**

233 — Folklore in the Old Testament

By Sir James G. Frazer. The author of "The Golden Bough" has abridged his own famous 4-volume work of studies in comparative religion, legend and law. Long unavailable, this lively classic is the source book for information on the customs, beliefs and institutions of ancient Israel. 476 pages, indexed. Orig. \$5.00. **Only 2.98**

251 — Lost Books of the Bible and Forgotten Books of Eden

Suppressed by the early Church Fathers, these Apocryphal Books are here revealed with all their mystery and prudery stripped away, revealing the fascinating, hidden beauties of the Lost Books — stories of Adam and Eve, Solomon, Pharaoh and other fabulous figures of antiquity. 562 pages, profusely illustrated with rare woodcuts and engravings. **Only 1.98**

332 — Paris

Famed Alpina Edition imported from France. Contains 40 striking and sharply-detailed photographs of its architectural highlights. Each superb plate measures 9½" x 13½" and is removable for framing. Printed in lush gravure on antique paper. **Only 1.98**

MAIL THIS COUPON WITHOUT DELAY OR WRITE TO —



MARBORO BOOKS • Dept. 1A, 117 E. 24th St., New York 10, N. Y.

Gentlemen: Please rush me, postage prepaid, the book bargains I have circled below.

☐ Enclosed find \$..... ☐ Please send C.O.D.

8 16 22 49 56 81 93 111 132
194 212 233 251 294 310 332 428

Name (PLEASE PRINT)

Address

City Zone State

A few cents extra for C.O.D. Add 15¢ per title for deliveries outside U.S.A. and possessions.

GUARANTEE: If not satisfied, return books after ten-day examination and money will be refunded.

mayor's house in the market town of Cool Clary. Thomas Mendip, a soldier, returns from the wars to find that a witch hunt is about to start. Without knowing who the witch is, he sets out to save her by creating a diversion: he claims to have murdered two villagers and demands to be hanged without delay. He is struggling with the mayor — a Colonel Blimp who has strayed into the fifteenth century, carrying with him an expert knowledge of bureaucratic fussiness — when the witch herself appears, an exquisite young girl called Jennet Jourdemayne. By the time it has been decided that Jennet shall burn and Thomas shall hang on the morrow, the two have begun to discover that they are in love. The lady, however, is not for burning and Thomas, naturally, breaks his date with the gallows.

Fry does not seek, like Eliot in *The Cocktail Party*, to keep his verse fairly close to prose. Fry's is full-blown poetry, and it is nourished by a superb vocabulary. At times the language is unabashedly sumptuous and at times wonderfully beautiful. Fry produces startlingly funny effects through the intrusion of colloquialism into the poetry, or by the juxtaposition of the modern (phrase or idea) and the medieval. His wit ranges from bold puns to flashing epigrams and elegant irony. There is nothing in the least pretentious or elusive in Fry's appeal: his play is most enjoyable to read. *The Lady's Not For Burning* introduces a writer who has restored to language a richness and delight which we haven't been treated to for a long time.

"The Dark and Bloody Ground"

Robert Penn Warren, whose three novels — *Night Rider*, *At Heaven's Gate*, and *All the King's Men* — have established him as one of our leading writers, has again given us a big, tumultuous story of political life in the South. *World Enough and Time* (Random House, \$3.50), a Literary Guild selection, has as its setting Kentucky in the early nineteenth century, the "Dark and Bloody Ground" where the frontier was gradually pushed back in the great Western expansion movement, and where a man's right to vote had often to be asserted by force. The novel's underlying concern is with the idea of justice; with man's perennial longing for justice and with the corruption that proliferates in the

Let us teach you — TO WRITE —

WAITER SELLS NOVEL

A Magazine Institute Student who is working as a waiter recently signed a contract for his first novel, with an advance of over \$1000 — after completing only half the assignments of the course.

PATIENT WINS PRIZE

A recent convalescent, after completing the Magazine Institute Course, won a \$100 prize for a magazine article.

HOUSEWIFE GETS \$300 CHECK

A Virginia housewife, after working a few months, in spare time, with The Magazine Institute, sold her first story to a woman's magazine for \$300.

(All experiences taken from MI files)

The Magazine Institute, a private school owned, operated, and staffed by successful writers and editors, offers *you* a chance to learn to write by *writing*—under the personal direction of an established writer. You receive regular assignments (as on a magazine or newspaper) designed to get you started and keep you writing. All your work is returned with detailed and authoritative criticism. You see just what needs to be done to improve your writing and develop professional skill. You get a chance to try fiction, non-fiction, or newspaper work, whatever seems best suited to your natural ability. Before long you are preparing, under our direction, in your own home, short stories, sketches, articles, features.

SEND FOR FREE CATALOG TODAY

The free catalog, offering a detailed description of the Magazine Institute plan of modern help to writers, telling about opportunities for writers, and identifying the writers and editors who serve as instructors, will be sent on request. Inquirers will also receive "The Best Job in the World" listing unsolicited testimonials from successful graduates. Fill in the coupon below and mail it today.

VETERANS:
THIS
COURSE
APPROVED
FOR
VETERANS'
TRAINING

THE MAGAZINE INSTITUTE, INC.
50 Rockefeller Plaza
Rockefeller Center, New York 20, N. Y.

THE MAGAZINE INSTITUTE, INC.
Dept. 17B, 50 Rockefeller Plaza
Rockefeller Center, New York 20, N. Y.

Please send free catalog, without obligation to:

NAME _____

ADDRESS _____

(Inquiries confidential — No salesman will call)

☐ Check here if eligible under G. I. Bill

name of justice; with the perennial conflict between the just end and the means of attaining it.

World Enough and Time traces the brief and stormy career of Jeremiah Beaumont, who grew up in a backwoods log cabin. At eighteen, Jeremiah was taken into the office of a prominent and respected Kentucky politician, Colonel Fort. Two years later young Beaumont's idealism caused him to break with his patron: he learned from a friend, Willkie Baron, that Fort had seduced a well-born and beautiful young woman and abandoned her when she bore him an illegitimate child. Jeremiah sought out this Rachel Jordan and in due course married her, having first promised that he would kill the Colonel. Hereafter Beaumont's five-year-long vendetta is the central thread in an intricate drama of Kentucky politics.

Warren brings into his novel a host of minor characters who typify the era — figures such as the backwoods doctor-schoolmaster, Leicester Burnham, a scholar who wrote Latin poems celebrating the natural beauties of Kentucky and chaste couplets in the style of Pope giving advice on diet, and who was also adept at banishing distempers with a dose of his "elixir vitriol in wine"; the itinerant preacher, Corinthian McClardy, whose spell-binding revival meetings drew the frontiersmen and their wives by the thousands; the radical newspaper editor, Percival Skrogg, a firebrand who found it advisable to wear a chain-mail undershirt.

The detail which Warren lavishes on some of his secondary personages gives the book vividness and breadth as a tapestry of the period; but it has its drawbacks in a novel that goes far beyond being a period piece. I found the regional historian intruding on the artist, who interested me much more; and the author's diffusiveness puts a slight damper on the reader's emotions. This is my one reservation about Mr. Warren's fine, superbly written novel.

Potpourri

THE PSYCHOANALYST AND THE ARTIST by Daniel E. Schneider. Farrar, Straus, \$4.00.

Dr. Schneider, a novelist as well as a psychoanalyst, rebuts the view that art has its foundation in neurosis, and sets forth a new theory concerning the nature of the artistic gift and of artistic tech-



New, Revised Edition

CORLISS LAMONT'S

The Illusion of Immortality

Introduction by
JOHN DEWEY

IS THERE A LIFE AFTER DEATH?

This is an authoritative statement of why it is neither scientific, nor necessary for the good life, to believe in immortality.

Recognized by eminent scholars, theologians, philosophers and laymen as the outstanding American book that presents the unorthodox answer to this age-long question.

PROF. JOHN DEWEY: "It is an extraordinarily complete and well-informed discussion. The candor, the informed scholarship and the positive grasp of the various aspects and implications of the problem of immortality ... make it worthy of the serious attention of all thoughtful persons."

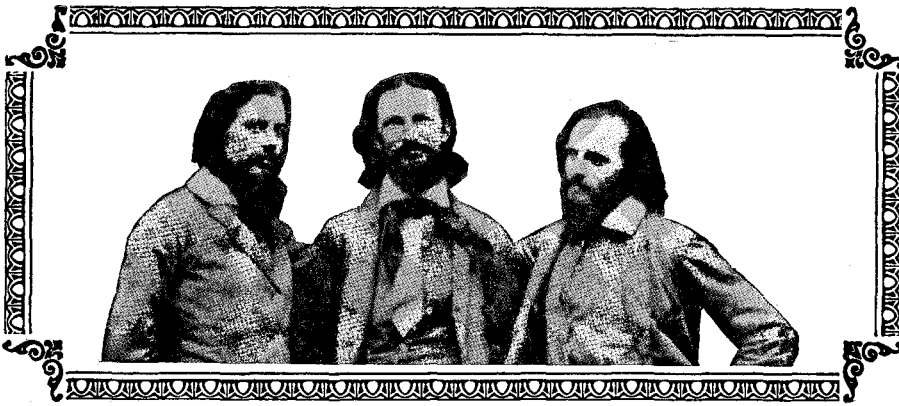
REV. JOHN HAYNES HOLMES: "Moves on a plane of serious inquiry. The author is concerned not with making a point but with finding the truth, and he reveals no trace of prejudice."

Illustrated. \$3.95

At your bookstore, or directly from:

PHILOSOPHICAL LIBRARY
Publishers

15 East 40th Street, Dept. 54, N. Y. 16



Three of the "Singing Hutchinsons" who founded
the Hutchinson. Minnesota. Read about them in

YANKEE EXODUS

by Stewart H. Holbrook

Founders and inventors, saints and sinners, great and small, the restless New Englanders have spread over our country since the Revolution and left their unmistakable stamp everywhere. Over 2,000 of

them—with all their achievements and foibles—appear in this robust, humorous, absolutely unique book by the author of *Lost Men of American History* and *Little Annie Oakley*. \$5.00

AT ALL BOOKSTORES

THE MACMILLAN COMPANY

Derso and Kelen's

UNITED NATIONS Sketchbook
A CARTOON HISTORY OF THE U. N.

→ "Springly, impudent and much more revealing than some of the windy press and radio pap that bores the world and causes it to lose faith in the U.N."
—N. Y. Herald Tribune

→ "These Hungarian caricaturists are the Gilbert and Sullivan of internationaldom."
—Christian Science Monitor

At bookstores, \$2.85
Special hand-colored and numbered edition limited to 500 copies, \$10.00

FUNK & WAGNALLS COMPANY

A LITERARY PROBLEM?

Sincere and friendly cooperation offered the professional or promising amateur. Literary services as well as conscientious sales attention. Write today for FREE booklet "YOUR ROAD TO WRITING SUCCESS."

DANIEL S. MEAD LITERARY AGENCY
419 Fourth Avenue, Dept. AM, New York 16

AN Atlantic Monthly Press NOVEL

Love and hate and
death touched her world
in one memorable day

THE Unheard Music

by ELEANOR CAMERON

"A deeply perceptive account of a day's journey among the terrors, regrets and hopes that are common to us all." —ELISABETH OGILVIE

At all bookstores • \$3.00

**LITTLE, BROWN & COMPANY
BOSTON**

nique. The work performed by the artist is very close to the work performed by the psychoanalyst, Dr. Schneider argues; artistic work is "dream-work turned inside out." What the dream condenses and scrambles, the artist (and analyst) amplifies and makes intelligible. Artistic technique is "a conscious mastery of the inherent power of the unconscious in its work of dream formation." Dr. Schneider illustrates all this and offers further theories about the creative process in investigations of *Oedipus Rex*, the *Journal of Delacroix*, three painters (Chagall, Picasso, and Van Gogh), *Death of a Salesman* and *Macbeth*.

AUBREY'S BRIEF LIVES edited by Oliver Lawson Dick. The British Book Centre, \$5.00.

One hundred and sixty examples of the thumbnail sketch as written two and a half centuries before Research was put on a scientific basis. Aubrey was not much hampered by the constricting distinction between fact and hearsay; his method of composition was utterly capricious; and because of an excess of sociability, he usually wrote under the influence of a hang-over. The resulting pieces, fortified by the charm of quaintness, make lively and delightful reading.

Among Aubrey's subjects are Sir Walter Raleigh, Descartes, Shakespeare, and Ben Jonson. A typical wind-up: "Sir Robert Pye, Attorney of the Court of Wardes . . . happened to dye on Christmas day: the newes being brought to the Serjeant, said he, The devill haz a Christmas-pye." The painstaking editing has been matched by a handsome job of bookmaking.

CHALLENGE: An Anthology of the Literature of Mountaineering edited by William Robert Irwin. Columbia University Press, \$4.75.

This unusual collection shows that mountaineering can be almost as fascinating to read about as murder—even to the reader whose only climbing has been done in an elevator. *Challenge* contains twenty-five accounts of mountain climbing by American and British authors of the past hundred years. A majority of the selections are high adventure; the remainder deal with the emotional, imaginative, and other aspects of "extraordinary adventure wilfully sought." International intrigue is mixed with mountaineering in the story by John Buchan. Thoreau chronicles an ascent of Mount Katahdin, Maine; and Sir Leslie Stephen is represented with a reflective essay on an ascent of Mont Blanc. Evelyn Waugh manages to be very amusing about an agonizing scramble up the heights beside Aden, in the company of a perfumed dandy who turns out to be a veritable eagle. In less frivolous company, the reader scales the Himalayas, the Andes, and the peaks of Africa and Asia Minor.

ACCENT ON LIVING



THE art of photography, like gear shifting in an automobile, has become too easy. Any chump can do it — and does. The results are omnipresent in American life. A man can't foresee what chance remark will cause another person to whip out a thick deck of photographs and demand that he study it, shot by shot, and make suitable comments.

There was a time when camera film was not to be squandered lightly. A six-exposure spool was the standard, and only the well-to-do operated grandly in the twelve-exposure dimension. It took a bright day, and the subjects had to hold their breath or the leisurely lens of the period would translate them into a blur.

With so few exposures available, "taking pictures" was an occasion in itself and usually followed a whacking big Sunday dinner, weather permitting. The more people in the photograph, the more precious film saved. On this basis, most snapshots were ambitious left-to-right group jobs, posed on the front steps and showing various relatives and small fry squinting into the sun, torpid with food, and all forbidden to breathe. It might cheer the subjects today, when they view the picture, to be mindful of the rigid conditions under which it had to be taken.

THIS MONTH

Aside from historic subjects like the Statue of Liberty, Bunker Hill Monument, and the White House (by way of showing that one had been there), most other photographs of the time were given over to growing children, in an attempt to prove, like Dr. Arnold Gesell of Yale, that significant changes in our appearance and size are perceptible over the years from infancy to, say, voting age.

All exposed film was entrusted to old Mr. Briggs, the family druggist, for developing and printing, and the result was decently interred in an album.

An amateur photographer nowadays uses more equipment than Mathew B. Brady, albeit he selects subjects somewhat less meaningful than Brady's. With great sums tied up in his gadgets, he feels obliged to photograph everything in sight.

Because he has already made so many pictures in his local environment, the modern amateur has to do much traveling. He is always just

back from a trip, full of facts and drolleries, and is in great demand as a dinner guest.

Disaster comes for the rest of the company after dinner, when an unwary listener pipes up with the comment, "It's too bad that you haven't any pictures of all those wonderful places on your trip!" At this moment, the more experienced among those present plead a cerebral hemorrhage or appendicitis and bolt. Their exit is not even noticed by the camera man.

Too bad? No pictures? Nothing of the sort. The man has hundreds of them — more packets of enlargements than a magician could stow in a tail coat. He does not come right out and say, "May I have your attention, please?" but he plainly expects it. "Yes," he replies, "I did get a few pictures if you would *all* like to see them."

The word "all" shuts off any competing conversation, and the photographic bug takes the floor. He pulls out a bundle of prints and muses aloud.

"Now here's an odd thing," he begins, "the dark part in the foreground. Right at the foot of the cliff. [No one else can see it.] You might think that's a shadow. It's not. Does look like one though. But that dark part is basalt. Right there at the

lower end of Goosegrease Canyon — I think that's where this was taken — is this great surface of basalt. You can see how dark it is. [They can't.] Now the funny thing, and the reason I took the picture, is that there is not another foot of basalt to be seen in all that Goosegrease country. The geologists can't account for it at all."

He hands the photograph to guest No. 1, seated at his right. "You can see the dark part there, can't you?" He points it out. While No. 1 is staring at inscrutable Nature, the camera man is off on his next photograph.

"I don't know how this got in here," he says. "Must be out of sequence. But hold on — I think — no, that was later on in the Skillibooch Valley. I have some wonderful shots of that country too. No, I've got it. This is the *other* end of the canyon and, as you can see, there is no basalt whatever around there."

The etiquette of this classic situa-

tion now obliges guest No. 1 to hand along photograph No. 1 to guest No. 2 and to accept photograph No. 2, the astonishing no-basalt scene, while the camera man himself starts to lecture on photograph No. 3.

It's like singing a round, and soon all manner of overlapping or unrelated ideas are beginning their mad-deningly slow course through the group. By the time guest No. 8 holds photograph No. 1, the camera man is talking photograph No. 9, and a certain mindless quality has settled over the room. It will last until enough guests go home or fall asleep in their chairs.

A good anchor man as guest No. 1 can balk the whole scheme and drive the lecturer to cover simply by looking at the pictures, letting eight or ten of them pile up, and handing them back to their owner. "Very interesting, I'm sure. I'd love to see the rest of them sometime," says the

anchor man. He then begins a loud conversation with guest No. 2.

"I understand you have a daughter in Camp Chuck-a-Luck," he says, "and I am glad of this chance to ask you a few questions about the place. My own kid is getting through school. . . ."

The anchor man gets up and beckons to his wife. "Come over here, Bess," he calls. "I want you to hear what Sam thinks about Camp Chuck-a-Luck. Bring Louise along, too. How old is your youngster, Louise? Only two? Well, that's just the age when you have to begin to look into these things and plan ahead."

With an anchor man to start shifting the furniture and making a general hubbub, the picture-passing can be shut off in jig time. It's almost worth asking a camera lover to dinner just to watch a dependable anchor man make him pack up and quit.

CHARLES W. MORTON

How TO MAKE A CHEESE FONDUE

by FRANK SCHOONMAKER

FRANK SCHOONMAKER is the author of many books on wines and the pleasures of the table, and of several European travel guides as well. This is his first appearance in the Atlantic.

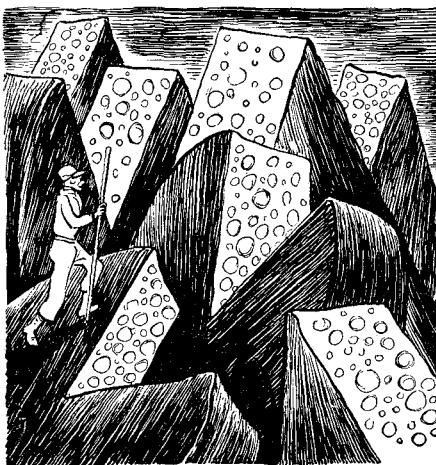
THERE are thousands and thousands of recipes in the hands of gastronomical initiates. But apart from their number, the most remarkable thing about them is the way they were secured. I mean that most of them haven't reached their present owners through what might be called normal channels.

The easiest way for anyone to get a recipe is to cut it out of a food column. The second easiest way is to ask the cook in a restaurant where you go regularly. But that isn't the way our gastronomical elite likes to function. Take, for example, the way I got my hands on the three recipes for cheese fondue which I shall present in this article.

Cheese fondue, *mes amis*, is a *plat* which achieves its small, fine, almost austere pinnacle of perfection only in its native Switzerland and only at altitudes of well over 11,000 feet. There are a thousand ways of making bad cheese fondue; there are five good ones.

One is the most closely guarded of all the secrets of the Swiss Diplomatic Corps; according to tradition and Swiss law it can be cooked only in the code rooms of Swiss Legations abroad and be served only by the code clerks.

The second recipe, of which some of the details may have been lost, was



stolen early in the eighteenth century by a band of dacoits believed to have been in the pay of the seventh Maharajah of Nepal.

The other three, as fortune would have it, are my own, and I reveal them here, together with the stories of how I acquired them, for the first and last time.

Highways and road maps in Switzerland, when I was a young man, were not what they are today, and on one stormy, rather menacing evening in July, I realized too late that I had taken the wrong turning. The road narrowed between high precipices as it climbed, and it was well after nightfall when I came at last to an exceedingly humble inn, perched on a rocky outcropping with a rushing torrent roaring by, hundreds of feet below.

The *patron* greeted me at the door, promptly provided me with a bottle or so of kirsch, and served me, exquisitely, in a small brown plate, a cheese fondue which was altogether *quelconque*.

I went to bed.

I was awakened by a tremendous noise which I cannot describe but which made me feel that the end of the world was at hand. A moment after, there was a violent pounding on my door. I opened it to admit the white-faced *patron* in nightshirt and with candle.

"Sir," said he, "if by good fortune and God's good grace you know anything of medicine, come at once to our aid." Without losing a moment, I threw on a robe and followed.

An unforgettable sight met my

eyes. A hundred feet from the inn, an avalanche had destroyed the entire valley. A broken coach lay amongst the tumbled rocks, and from it the servants had already brought an old man, gray of face and very tall and thin, who appeared on the point of death. Taking charge, I asked the chef to prepare as rapidly as possible a bisque of *homard*. He made a quart and the old man drank it, crying like a child, spoonful by spoonful, his head in my lap. We became friends.

"Young man," he said, "I am the thirty-ninth and I now believe the last Baron of Fondenheim. My only son and only grandson perished in the carriage of which you see the ruins before you. My line dies with me. I am an old man. You have saved my life. May I give you my greatest treasure?"

An hour later, as I unfolded the yellowed parchment, I realized that I had indeed a treasure — the original, the only original, of the great Fondenheim recipe. It follows: —

Take 4 pounds of good Swiss cheese, preferably imported, cut into strips, and dredge in flour. Rub the inside of a large earthenware casserole with garlic, put in 2 quarts of good white wine, and heat until almost boiling. Add the cheese slowly, stirring constantly. Salt, pepper, nutmeg to taste. Add $\frac{1}{2}$ bottle of kirsch. Serves 8-10.

Highways and road maps in Switzerland, in the never-to-be-forgotten days of my youth, were not what they are today, and one sultry July evening, hurrying forward under a dark, angry sky, I realized too late that I had taken a wrong turning. It was with a definite sense of relief that I came, well after nightfall, to a modest, bleak little inn, perched on a barren eminence with a rushing torrent roaring by, thousands of feet below.

The *patron* received me at the door, promptly provided me with a couple of bottles of kirsch, and served me, laboriously, in a small earthenware bowl, a cheese fondue which was rather undistinguished.

I went to bed.

I was awakened by a tremendous noise. Seconds later, there was a violent pounding on my door. I threw it open to admit the *patron*. He was in his nightshirt, with a candle in his shaking hand, and his face was green.

"Sir," he cried, "if by good for-

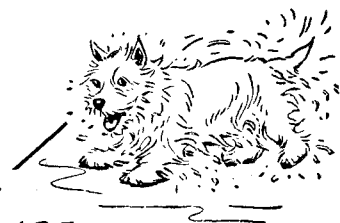
ACCENT ON LIVING



What... NO PRIVACY?



"WE NEVER HAVE A MOMENT TO OURSELVES, WHITEY!"



"THAT'S NATURAL, BLACKIE. PEOPLE ARE ALWAYS LOOKING FOR US, BECAUSE THEY KNOW THAT BLACK & WHITE'S QUALITY AND CHARACTER NEVER CHANGE!"

"BLACK & WHITE"

The Scotch with Character



BLENDED SCOTCH WHISKY 86.8 PROOF

THE FLEISCHMANN DISTILLING CORPORATION, N. Y. • SOLE DISTRIBUTORS

tune and God's good grace you know aught of signals, come at once to our aid." Without losing a moment, I threw on a robe and followed.

Far down in the gorge below the inn, like twin trails of gossamer silvered by the setting moon, ran the tracks over which the Saint Bernard



Express was due to pass in a matter of minutes. On and athwart them lay a huge boulder, obviously dislodged by the blast which had awakened me.

Who was the perpetrator of this dastardly act? After a quick glance round I spotted him; skulking like a jackal in the shadows. I was on him like a flash.

"Nihilist! Assassin! Bakunist!" I cried. "You are cornered at last." For a moment he tottered on the brink of the abyss, and his left hand, with a scrap of paper in it, made a half-convulsive gesture toward his mouth. Then, losing his footing, he fell. The paper in his hand fluttered to the ground.

An hour later, by candlelight, as I examined the paper, my years of intelligence training stood me in good stead. To a skillful cryptographer, all the indications were there. It was clearly written in one of the disused codes of the First International, and within a few minutes I realized what I had — a historic trophy indeed, the original recipe for the cheese fondue of the Revolutionary Underground. The recipe: —

Take 1 pound of good Swiss cheese, preferably imported, cut into strips, and dredge in flour. Rub the inside of an earthenware casserole with garlic, put in 1 pint of good white wine, and heat until almost boiling. Add cheese slowly, stirring constantly. Salt, pepper, nutmeg to taste. Add 3 tablespoons of kirsch. Serves 3-4.

On one memorable July day in Switzerland, I realized by late after-

noon that I was on the wrong road, and when the magnificent Alpine sunset lighted up the western sky, I could see storm clouds ahead that made me wonder whether I should be able to find shelter before a thunder-shower arrived.

I was surprised and delighted, just at nightfall, to find myself at the door of the most idyllic little inn imaginable. A charming mountain brook ran under its windows, and the entire landscape radiated an atmosphere of extraordinary tranquillity and peace.

The *patron* received me on the doorstep, promptly provided me with a small demijohn of kirsch, and served me, with incomparable tact, in a flat oval bowl of ancient Italian majolica, a cheese fondue which was unpretentious but adequate.

I went to bed.

I was awakened by the sound of angry voices in the dining room downstairs. A moment later someone tapped lightly on my door. I opened it noiselessly to admit the red-faced *patron*.

"Sir," he whispered, "if by good fortune and God's good grace you speak English, as I believe you do, come at once to our aid." Without losing a moment, I threw on *Lederhosen*, a Tyrolean jacket, and crampons, and followed.

Halfway down the stairs he halted. "Sir," he whispered, "you are about to meet the most beautiful and most dangerous woman in Europe. You will pretend to know her and you will call her . . . Eglantine."

At this point you could have knocked me over with a straw.

"Noble sir," he went on, "you must pretend to be the young woman's American cousin. The old fool is her uncle. Your name is James Madison."

"Fourth President of the United States," I replied grimly.

As we entered the dining room, an extraordinary sight met my eyes. A giant of a man, dressed in an old-fashioned way, sat hunched in a chair in one corner of the room, with cocked pistols on either knee. Across from him, tears streaming down her little heart-shaped face, was a vision of loveliness that took my breath away.

She threw herself into my arms. "Cousin James," she cried, "how are things at home?"

"I have never seen things so good," I replied gallantly.

"Enough!" exclaimed the gray-

haired giant with the pistols. "My pretty Eglantine, I was wrong again, wrong to suspect you. I shall go." He marched out with never a backward look, and the floor trembled under his feet.

I found myself looking into a pair of blue eyes, dark and deep as the sea.

How can I describe what came to pass? Even today, years later, it seems but an hour ago, and even today it comes back to me. I can see her lovely head bowed over the charcoal stove, her deft fingers at work, her radiant eyes. . . .

"Cousin," she smiled, "take note of what you see."

As if I needed such advice! My flying fingers were taking down in shorthand notes every move she made.

Finally, "You may taste it, Cousin," she whispered.

I put my lips to the wooden spoon and a moment later I was on my knees, kissing the hem of her gown.

"My lady," I said, "this is my journey's end."

For a brief moment her little hand lay on my head. "I am Eglantine de Gruyère," she murmured. "And now, Cousin, since you know *all* my secrets, we must never see one another again."

It was days later before I could bring myself to reread what I had written on that precious, never-to-be-forgotten night. But here, now that I am older and romance lies behind me, are my notes: —

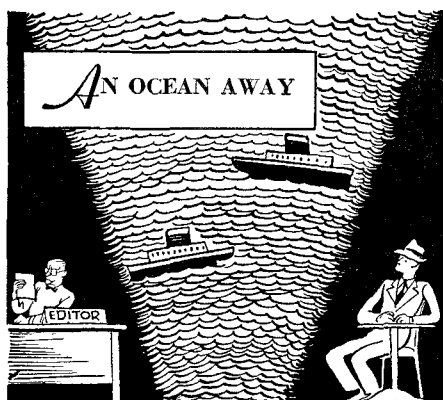
Take $\frac{1}{2}$ pound of good Swiss cheese, preferably imported, cut into strips, and dredge in flour. Rub the inside of a small earthenware casserole with garlic, put in $\frac{1}{2}$ pint of good white wine, and heat until almost boiling. Add cheese slowly, stirring constantly. Salt, pepper, nutmeg to taste. Add 1 or $1\frac{1}{2}$ tablespoons kirsch. Serves 2.



ANTHROPOLOGY CLASS

by HUGHES MEARNS

A BILLION years would take to span
The time from ape to present man;
A gal needs but a day or two
To make a monkey out of you.



by PAUL SCOTT MOWRER

Foreign correspondent and later editor of the Chicago Daily News, PAUL SCOTT MOWRER describes the problems peculiar to news reporting when the home office is an ocean or two distant. He is now carrying on with his writing in Chocoma, New Hampshire.

AT HOME, on the newspaper, the reporter ran with the pack. Abroad, an ocean away, he finds himself slowly turning into a human wolverine. He lives and hunts alone.

At home, he could feel the eyes of his aging parents on him, and critical Aunt Matilda's. Even off hours, this tended to make him behave. Every day, he had to get to the office on time, preferably without a hang-over. And there were Tom and Joe and Lucile and the rest of the gang. It gave him a good feeling. Pretty soon his editor told him what was wanted. That same day, he saw his words in print. He had a deep sense of being where he belonged.

Abroad, though the news agencies and two or three papers do maintain regular bureaus in some few capitals, the chances are that now, as a foreign correspondent, he is quite by himself, in a strange place of which he can never be really a part.

Even a wife and children, if he has them, are not the same curb on his natural waywardness that other relatives are. As for the foreigners, they don't seem to care what he does. To them he is merely a foreigner.

So he can lie abed as long as he likes. He can stay in or go out. He can wait until evening to have his first drink, or can start before breakfast. He can take the day off — why not two? Wasn't Al Bose away on a binge three whole weeks without the paper finding it out?

His work is why he is here, and it seems important. But the things that excite people here may not mean much over there. He has to try to remember how folks think at home,

and somehow write about here as if he were there.

That man in the poem who shot up a random arrow was fortunate. There was at least a fair assurance that it fell to earth intact. Even to see what "they" did with his cabled story, a correspondent must wait for the mail boat two or three weeks. By that time so much else has happened that the whole paper seems very stale.

However, he looks for his piece. It should have been on page one. He finds it on page sixteen. It appears rather short. That is because they have simply left out the key paragraph — the one in which he explained what the strike was really about. And here — oh, Lord! — a "not" got lost. Instead of that "Communism is not gaining," they have him saying it is!

Just what do they want over there? Do they know, themselves? He sends them a little feature about the famous old circus clown who, on retiring, remarked that "the only way to live happy is to live in seclusion." They put it on page one. He sends them another about the Italian shoe clerk who confided to an interviewer that he was "tired of living in historic moments" — and they don't even use it! Their editorials make him wonder if they even read his stuff.

All this is not supposed to affect his morale. Didn't his editor, when he left, cordially invite him to keep in touch? But just try to clear up a misunderstanding — over an expense account, say — by letter or cable!

In time a correspondent gets to know all sorts of editors. There is the kind who never tells a fellow a thing except "Hold down" or "Mail it." Enough such orders will make anyone feel like sneaking a few days off.

Again, there is the editor who is always wiring "Congratulations," in hopes that this will make a fellow forget about that raise in salary he didn't get. Then if, encouraged, the correspondent redoubles his zeal, along comes one of those hold-down orders that leave him groggy — until the next congratulations.

Some editors have a mania for trying to improve a man's copy, thus making the writer say what he didn't quite mean in a way he didn't intend. Though this is hard to take, there is something harder. Just when the big international circus is about to move into his territory, and the correspondent has done the preliminary work and is all set to cover this conference that

the great world will be watching, he is handed a wire: "Our Washington correspondent, Bill Blah, is arriving with the American delegation and will be in charge. Please give him every assistance." So Blah will not only steal the story but, in so doing, will make use of another fellow's experience.

Worst of all is the editor who imagines he knows better what is going on than the man on the spot. Armies have learned, the hard way, to trust the field commander or else change him; not some editors. "Protest to Swiss authorities intolerable delay your cable seventeenth." "Rush 600-word interview Attlee on Truman's socialized medicine plan." Protest to the square-headed Swiss? Interview the British prime minister? It comes to a man abroad that, for best results, an editor an ocean away should advise and consult, not order.

In due course, the editor comes on a trip. It seems like a good opportunity to get things straightened out. But events soon reveal that what he came for, really, is recreation. The political crisis, the correspondent's difficulties with the hidden censorship, the garbling of stories, plainly interest the visitor far less than shows, restaurants, night clubs, and where to shop.

The correspondent himself has a right to home leave after two or three years. For months he dreams of it. Then, one day, there he is, and there they all are, Tom and Joe and Lucile. Who has changed? Is it he or they? Even in their kindness, he detects



restraint, as if he had come from serving a prison term. Friends and relatives run him ragged with good old American hospitality, but their questions have shown him that they couldn't have read his dispatches. And the one thing almost nobody asked him about was his work.

True, he makes friends abroad. He gets to know the other American correspondents. He and they have

problems in common and can have a good time together. Full intimacy with them is not easy, however, for these are also his competitors. He meets other Americans, and they carry on endlessly about how wonderful everything was at home, as they now recall it, and how hard it is to keep house or do business over here.

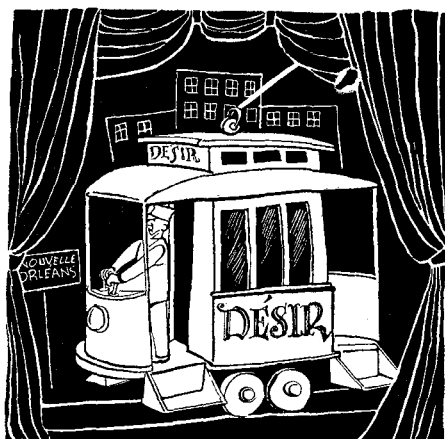
To get to know foreigners is pleasant and rewarding, but even with Englishmen it takes about a year. And when, by studious effort, one has partly broken down the language bar, psychological bars remain. Lest one give offense, one can seldom say to a foreigner what one honestly thinks about his country; nor will he, in the first few years, be wholly frank.

Thus, though perhaps outwardly sociable, the correspondent lives more and more to himself. To know he can lie abed may be gratifying; to do so would be childish. In the absence of office discipline, he sets up a daily routine of his own. Lacking social discipline, he begins to develop that sternest of all the disciplines, self-discipline, and takes pride in his growing independence.

Even the unavoidable frustrations help to strengthen his philosophy. For he isn't abroad just for money or adventure. Where the people are sovereign, as with us, how can they judge rightly unless they are rightly informed? To keep them informed is the correspondent's job. He has a duty to his government, yes, and to his paper. But the man he must never let down is his reader. It is for this fellow citizen, primarily, that he is working. The thought sustains him through many a faltering hour.

A moment comes, perhaps, after more years abroad than he cares to count, when a correspondent has to admit that he actually likes this specialized, rather lonely life. He has proved to himself he can go anywhere, under any conditions, and get along, in a way, with any nation or race. To go back to the old office, and function again on a team, no longer holds out a temptation; for self-reliance, hard to win, is equally hard to surrender.

Is he only an ocean away now? Or is it a world?



LAUGHTER DANS LE TRAMWAY

by RENÉ MACCOLL

RENÉ MACCOLL, *Paris correspondent of the London Daily Express, was formerly with the British Information Services in New York.*

OVER here in Paris there has been a risible piece of entertainment on offer. No, not a new *boîte* on the Left Bank, but a smash hit in the theater, entitled *Un Tramway Nommé Désir*.

(Do look out for it. I'm told that you had something on Broadway bearing a faintly similar title — but that must be purely coincidental, as the saying goes; because everybody said your piece was so terribly sad and frightfully sordid. This one that I'm talking about is almost as uproarious as the Marx Brothers at their top-most peak.)

Here's what happens: the curtain rises on a scene which — if we are to believe the program — is taking place in New Orleans, Louisiana. It's supposed to be the home of a Polish-American called Stan.

One can tell at a glance that it is, *hélas*, a strictly underprivileged home, because (a) its walls are diaphanous, thus enabling *ces messieurs et mesdames* of the audience to see right through them into the *rue en dehors*, and (b) there is no sign of a video set. A telephone, yes (one of those gangling French jobs, about a foot high), but definitely no video.

Now this Stan, the Polish-American, is played — and follow this carefully, if you please — by a very good-looking and slender young Frenchman called Yves: Yves is a cross between Jean Sablon and Louis Jourdan, the juvenile lead in films. As an ape man, he looks like something dreamed up by Christian Dior.

But he does have fine back muscles. He realizes this, and you get to know all those muscles like old friends before the evening is out because this Stan-Yves keeps on changing his shirt like mad. Whenever he does so, with his back elaborately turned to the audience, a man in the wings, or possibly lying in front of the footlights, turns on a special off-mauve light which shadows up the muscles most toothsome.

And just why does Stan change his shirt so often? Nine times out of ten it's *pour le bollinck*. (And of course you know all about *le bollinck*, don't you? Sir Francis Drake, you will recall, was engaged in *le bollinck* that time on Plymouth Ha! when the Spennish *flotte* showed up.)

Stella, the little woman, is apt to dart out at Stan. "Stan!" she cries reproachfully. "Is it that you go out of our hearth once again — to *le bollinck*?"

"Of course," returns Stan, a he-Polish-American-Frenchman to his very sideburns, flexing his back muscles, which *le bollinck* is apt to develop like the very deuce. As an afterthought he turns and hurls wifey to the floor. Never get between a Polish-American-Frenchman and his *bollinck* seems here to be the inescapable moral.

But Stan has his intellectual moments too. It's not all outdoor sports for him. Often he dons a tasty soccer jersey (daring vertical stripes) and settles down at home for a good game of *le pokkaire* with friends. But the beasts drink as they play — and that provides a rich moment of high comedy that even Groucho has rarely bettered. For the four men take turns at huge-seeming swigs from one tiny bottle of French (Pilsen type) beer.

Round and round the table of debauchees goes that sad little bottle — and in no time its innocuous contents transform the four into sententious drunks. Their eyes glaze, and they give way to such unspeakable remarks as "*Zut, alors!*" and "*Et bien — toi!*"

Says the "Analysis of the Performance," thoughtfully provided at the rear of the program, "It is an earthy life this, whose unique distractions are the bowling, the poker, the cinema, and the love." Aha — the love!

Sure enough, into this uniquely earthy life there flutters a female character called Blanche du Bois.

She turns out to be Stan's sister-in-law, and she looks like a fugitive from a down payment. Stan dislikes Blanche right from the start. For one thing, she puts her capacious wardrobe trunk right spang in front of the cupboard where he stores his Pernod-Viskey. Then again she always seems to be in the bathroom when he gets home all tuckered out from a hard day's work at *le bollinck*.

Blanche, let's face it, is just a touch tactless. She asks Stella: "See you in the character of that one the least trace of *un gentleman*?" Stan, on the other side of the bedroom curtain, overhears this slur. Glowering, he changes his shirt.

Every so often Stan, to prove that he is indeed no gentleman (pronounced throughout this offering as "jantlaman"), has a crack at the fourth of the distractions listed in the "Analysis of the Performance." You can always tell that something is brewing because — you've guessed it — off comes another shirt. However, the subtle French prefer to leave nothing to chance. They call in *le symbolisme* to aid *l'amour*. Stan does three mad *entrechats* across the stage, wearing a pair of bright red silk pajama trousers, but with bared torso-back strictly audiencewards. Blanche glances up from her dreams of *la plantation*, startled. "Brute, val!" she ejaculates. Black-out.

But immediately, through the diaphanous walls, you can perceive, in the street outside, a colored shimmy dancer billowing around to the sound



of voodoo drums. The audience is notably entranced by this conceit. "Ah, *ces Américains*!" they observe knowingly to one another.

The shimmy dancer is quickly succeeded by a really typical American street vendor. A character wearing a hard straw hat, horn-rimmed glasses, and spats is next seen out-

"Ertdergs, ertdergs," he drones. The audience instantly catches on. (And you must know all about ertdergs, don't you? They *mangent* them at *le bessboll game*.)

So it goes. Never a dull moment. "I permit myself to draw attention to a certain lack of manners," says one character. "He is frankly bestial!" snaps another, in the authentic accents of Louisiana.

The straight man is called Meetch. He wears plastic suspenders and wants to introduce Blanche to his *maman*. But Stan cannot forgive the difficulties about getting a bath in his own *salle de bain*. He strides in suddenly, *très brute*, past the bespatted ertderg men outside. He is wearing a steamer cap, windbreaker jacket, plus-four trouserings, and white socks. Caddishly enough, he informs Meetch that it is by no means only a down payment that Blanche is a fugitive from. Meetch instantly feels that *Maman* wouldn't much care for anything like that. Pausing only to toss off half a glass of beer, he leaves the stage with unsteady gait.

Back to the "Analysis of the Performance": —

"Blanche, beneath this final stroke of fate, feels her reason vacillate." But the blow only makes her the more talkative. There is no holding her now.

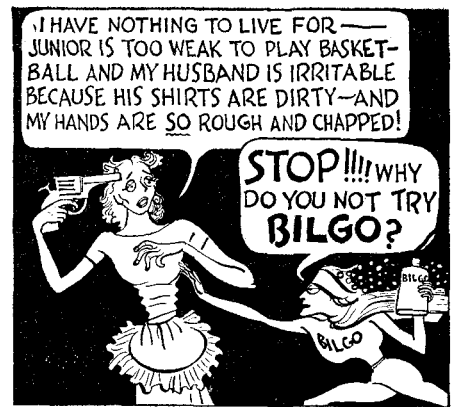
And obviously there's only one remedy. Yes, the Great American Remedy: call in the psychiatrist. But lucky Blanche! She, it seems, is to get him free, instead of having to shell out the 25-dollar fee twice weekly, which is what the run-of-the-mill patient would do.

So, in a surprise ending, Blanche neatly turns the tables on Stan-le-Brute, Meetch-le-Milksop, Stella-la-Femme, the card players, shimmy dancers, and ertderg men. For, like all good *Américains* — even the most underprivileged — they have all been longing to be vetted by a good psychiatrist. And now here is tiresome old Blanche pulling it off ahead of them all — and for free.

And as she sweeps out in triumph, arm in arm with Monsieur le Directeur du Snake-Pit, all hands burst into tears of jealous rage and maudlin self-pity.

Rideau.

Don't miss this if you can catch it on the road. One long laugh. Guaranteed to help you forget your own troubles for a couple of hours.



IRRITABLE?

by ANN GRIFFITH

"Writing is my seventh career, and the one I'm going to stick to," ANN GRIFFITH tells us. She has been at it a little over a year, and has already had several articles published.

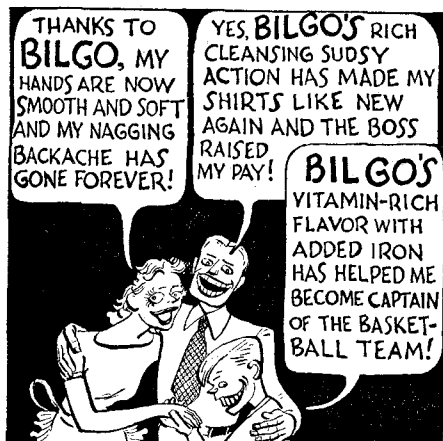
OF ALL the phantasies created for us by American industry, the most satisfying to me are those presented in the advertising comic strips. These tight, colorful little dramas appear each Sunday down at the bottom of the pages of the comic sections. Their superiority to the run-of-the-mill, undramatized advertisement can be easily demonstrated.

Recently, in the straight ads, there has been an attempt to suggest that the housewife is in love with her box of soap powder. She seems not only to like to wash clothes with the contents, but also to have a strong attachment to the box itself. She fondles it, rubs it against her cheek, hugs it, and whispers its praises into its ear. But what a deaf ear! For the box does not respond to any of this flattery, and the relationship between housewife and box is wholly unsatisfactory.

In the comic-strip version, however, this relationship comes to life, as it were. Soap powder is represented as a half-naked, handsome young man, reminding one vaguely of the iceman of olden times.

Like Superman, he arrives from out of nowhere just when things look blackest. The usual pattern is for a husband to storm out of the house, leaving behind a wife reduced to tears by his harsh words on the subject of improperly washed shirts. Instead of the cold comfort of a soap-powder box, rescue comes in the form of soap powder personified. He washes the shirts in a trice, getting them so clean that the wife can scarce

credit her eyes, and then flies off. At the end of the day, when the husband comes home, his shirts please him with their new, snowy whiteness, and he can love his wife again.



Dagwood, in the authentic comics, remarks frequently that “husbands are a sorry lot” — an opinion that is supported over and over in the advertising comics. What tempers! But every tantrum has its antidote.

The Flynn family, in the first three panels, seems to be in a pretty bad way. Dad is trying to fix Junior’s train but clearly is only making it worse. “Gee, Pop,” the little boy nags, “can’tcha make it work?”

“No! Blast it! And I’m tired of trying!”

Mom, on edge like everybody else in this touchy household, flares up at this indirect slur. “Don’t glare at me. I do everything else around here. I can’t fix trains too! Other men can put electric trains together — why can’t you?”

That’s all it takes to send Dad from the house, yelling as he leaves. “Other wives don’t nag their husbands, either. I’m going for a walk.”

Junior, evidently all too used to such goings on, merely shrugs, “Guess I’ll go to bed.”

One breakfast of dry cereal transforms this domestic hell into the happy home that appears in the last panel. Thanks to “wheat energy,” Dad is able to fix the train the very next night. Junior is proudly showing it to a friend and telling him, “My dad’s terrific! He can fix *anything*!” Dad is holding Mom’s hand and saying, “I don’t know what’s happened. I feel like a new man, honey!” To which she is replying, “And you’re going to go on feeling that way. From now on, the Flynn’s are going to have fun out o’ life.”

The more outrageous the behavior of the husband in the first panel, the

greater the satisfaction in seeing him become a decent fellow again in the last panel. After another sleepless night due to you-know-what kind of nerves, Peggy peers desperately into her mirror and exclaims, “O-o-o-o . . . I look a wreck this morning.” Husband John, a boor if there ever was one, answers, “I’ll say you do!” Worse than that, we learn from Peggy in the next panel that “John left for work without even k-k-kissing me — my l-l-looks don’t *attract* him any more!”

They both turn to wheat tea and the results are all anybody could ask. Peggy blooms once more. John looks gay and gallant and is sufficiently reattracted to propose this toast — in wheat tea of course: “To *my wife* — the best-looking gal in town!”

In another beverage strip, Neddy and five of his little friends are gathered at his house to elect a president for their new club. The vote is three for Neddy and three for Sandy, a hot contest — almost as hot as the steaming cocoa that Neddy’s mother serves. After the six hungry boys down their hot chocolate, a new vote is taken and Neddy is unanimously elected. This is a positive result — serve hot chocolate and be elected president.

Changing one’s brand of cigarettes will not do that sort of thing, but it will get one out of a peck of trouble — on the home front or in any other walk of life.

A tugboat captain almost rams into a cruiser. Reason: “Smoking irritates my throat



so much I feel awful and you can’t do your best when you’re not feeling up to par.”

A trapeze artist misses her partner. Lucky it’s only a rehearsal and there’s a net to save her! Like the rest, she has a ready explanation: “My timing is off. Maybe it’s because my throat feels so parched and irritated from smoking, I can’t keep my mind on the job.”

To none of these characters, so irritated by parched throats as to jeopardize life and limb, does it occur to stop smoking. They make the “nose test,” change their brand of cigarettes, and return to happy, useful lives. One of them speaks for all when he says, “I’ll admit I’m doing a better job now that there’s no *cigarette hangover* to make me irritable and out of sorts.”

There is no demand that the advertising comics be logical, and no effort need be wasted in thinking up subtle ways to bring in the commercial. Just bring it in, that’s all. A brand-new mother is being presented with an adorable pink baby in an adorable pink blanket. Her reaction? “I’m almost afraid to touch her little face. My hands are so rough!” Instantly the baby is forgotten, for we have arrived at a subject which everyone knows is dearer to a woman’s heart even than a newborn babe — rough hands! The rest of the strip is given over to a spirited and clinical discussion between mother and nurse on this timeless topic.

THIS RIVER

by DANIEL SARGENT

AND as the angle of the river laughs
So do I laugh at laughter of its angle —
The ripples making liquid autographs
For the bright sun to glory in and spangle.

And as the straightway of the river slides
Smooth to a mirror and becomes the sky,
And photographs the white cloud as it glides,
So to the same tranquillity turn I.

And as it herringbones and starts to dance,
Making the craft I ride in play cockhorse,
I were not human in the circumstance
Not to adopt the exuberance of its course.

There’s something so disarming in a river
It conquers without giving a command —
This river where the diamonds shake and shiver,
This river playing paradise through the land.